

UNIVERSITY OF VICTORIA

1995-96

# CALENDAR

OFFICE OF THE UNIVERSITY SECRETARY



VICTORIA, BRITISH COLUMBIA, CANADA



## INQUIRIES

The University's telephone number is: (area code 604) 721-7211. (FAX number is 604-721-7212.)

The University's mailing address is: University of Victoria, Box 1700, Victoria, British Columbia, Canada, V8W 2Y2.

Inquiries from prospective students in regard to the following should be directed to the officer or office shown.

### Admission and Information About Programs Offered

All Faculties, Schools and Programs, except Law, Graduate Studies:  
Director of Admission Services

Faculty of Law:

Dean, Faculty of Law

Faculty of Graduate Studies:

Dean, Faculty of Graduate Studies

### Advice About Course Selection

Advising office of the faculty concerned

### Counselling (non-academic)

Director, Counselling Services

### Financial Aid

Student Financial Aid Office

### Day Care

Manager, Child Care Services

### Health Services

Director, Health Services

### Housing and Residence Accommodation

Manager, Housing and Conference Services

### Parking Permits

Manager, Campus Security Services

### Public Relations

Director, Public Relations and Information Services

### Summer Studies

Administrative Clerk, Summer Studies (604) 721-8471

### Textbooks

Manager, Bookstore

Inquiries from other persons in regard to the contents of this Calendar or the University in general should be directed to the University Secretary.

## OFFICE HOURS

The offices of the University are open throughout the year from 8:30 a.m. to 4:30 p.m., Monday to Friday, except on statutory holidays and the closure period between Christmas and New Year.

## UNIVERSITY APPLICATION DEADLINES

### Application for Winter Session

No assurance can be given that applications received after the deadline dates can be processed in time to permit registration in the Winter Session. (This does not apply to Law — applications received after March 31 will not be considered.)

|             |   |
|-------------|---|
| January 31  | School of Physical Education;<br>Faculty of Education professional year and<br>Post Degree Professional programs<br>(including all official documentation).   |
| February 28 | Early admission for current high school students<br>applying from within Canada;<br>School of Social Work.  |
| March 31    | Faculty of Law;<br>School of Child and Youth Care;<br>Visual Arts.  |
| April 1     | School of Nursing (September entry)   |
| April 30    | Health Information Science;<br>Faculty of Business;<br>Applicants outside Canada — programs other than<br>those listed above.   |
| May 15      | Applicants in Canada — programs other than those<br>listed above.   |
| May 31      | Faculty of Education documentation deadline for all<br>non-professional year applicants and final transcript<br>deadline for professional year applicants who had<br>course work in progress at the 31 January deadline;<br>Faculty of Engineering;<br>Faculty of Graduate Studies;<br>Documentation deadline for students applying from<br>outside Canada (including TOEFL). |
| June 15     | Reregistering student applications [See Reregistration<br>on p. 14] — except programs which indicate earlier<br>application deadlines.  |
| July 1      | Documentation deadline for students applying from<br>within Canada (except for Education students).   |
| October 31  | Applicants in Canada for January entry.   |
| November 30 | Documentation deadline for January entry.   |

### Application for Summer Studies

|          |  |
|----------|--|
| March 31 | Courses beginning in May (first admission).  |
| March 31 | Courses beginning May (reregistration).  |
| April 30 | Courses beginning in July (not applicable to<br>students taking courses beginning in May). |

### Application for Graduation

|            |                    |
|------------|--------------------|
| July 1     | Fall Graduation.   |
| December 1 | Spring Graduation. |

N.B. Each of the above dates is a fixed due date. If a fixed date falls on a holiday, Saturday or Sunday, the nearest following day of business will be considered as the deadline.

## NOTICE CONCERNING FEES

*It is expected that it may be necessary to increase fees above the levels shown in this Calendar. Notification of any required changes in the current fee schedules will be given as far in advance as possible by means of a supplement to this Calendar.*

## OTHER UNIVERSITY PUBLICATIONS OF INTEREST TO PROSPECTIVE STUDENTS

### Admissions Handbook and Mini-Calendar

Provides information on the University, programs and courses offered and procedures to follow in seeking admission. Available from Admission Services.

### Preview Newsletter

A bulletin announcing changes in admission regulations or procedures, new programs and items of general interest. Sent to all B.C. high schools and colleges quarterly.

### Summer Studies Calendar

Lists offerings available in the period May through August. Available from the Administrative Clerk, Summer Studies (721-8471).

### Distance Learning and Immersion Course Guide for Off Campus Students

Lists credit offerings available to off campus students. Available from Continuing Studies.

### Continuing Studies Calendar

Lists nondegree programs; issued in the fall and spring. Available from Continuing Studies.

Late afternoon and evening courses, which would be of particular appeal to part time students, are located in the *University of Victoria Telephone Registration Guide and Timetable* which is available from Records Services. The late afternoon and evening credit courses are identified with a double asterisk(\*\*).



UNIVERSITY OF VICTORIA

# *Calendar* *1995-96*

The University of Victoria operates under the authority of the *University Act* (R.S.B.C. 1979 c. 419) which provides for a Convocation, Board of Governors, Senate and Faculties. The *University Act* describes the powers and responsibilities of those bodies, as well as the duties of the officers of the University. Copies of this Act are held in the University Library. Persons who wish to purchase copies may do so through Crown Publications, Inc., 521 Fort Street, Victoria, British Columbia, Canada.

The official academic year begins on July 1. Changes in Calendar regulations normally take effect with the beginning of the Winter Session each year. Nevertheless the University reserves the right to revise or cancel at any time any rule or regulation published in this Calendar or its supplements.

The Calendar is published annually in the Spring by the University Secretary under authority granted by the Senate of the University.



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# SESSIONAL CALENDAR 1995-96

| JANUARY |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| S       | M  | T  | W  | T  | F  | S  |
| 1       | 2  | 3  | 4  | 5  | 6  | 7  |
| 8       | 9  | 10 | 11 | 12 | 13 | 14 |
| 15      | 16 | 17 | 18 | 19 | 20 | 21 |
| 22      | 23 | 24 | 25 | 26 | 27 | 28 |
| 29      | 30 | 31 |    |    |    |    |

| FEBRUARY |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|
| S        | M  | T  | W  | T  | F  | S  |
|          |    |    |    | 1  | 2  | 3  |
| 4        | 5  | 6  | 7  | 8  | 9  | 10 |
| 11       | 12 | 13 | 14 | 15 | 16 | 17 |
| 18       | 19 | 20 | 21 | 22 | 23 | 24 |
| 25       | 26 | 27 | 28 |    |    |    |

| MARCH |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|
| S     | M  | T  | W  | T  | F  | S  |
|       |    |    |    | 1  | 2  | 3  |
| 4     | 5  | 6  | 7  | 8  | 9  | 10 |
| 11    | 12 | 13 | 14 | 15 | 16 | 17 |
| 18    | 19 | 20 | 21 | 22 | 23 | 24 |
| 25    | 26 | 27 | 28 | 29 | 30 | 31 |

| APRIL |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|
| S     | M  | T  | W  | T  | F  | S  |
|       |    |    |    |    |    | 1  |
| 2     | 3  | 4  | 5  | 6  | 7  | 8  |
| 9     | 10 | 11 | 12 | 13 | 14 | 15 |
| 16    | 17 | 18 | 19 | 20 | 21 | 22 |
| 23    | 24 | 25 | 26 | 27 | 28 | 29 |
| 30    |    |    |    |    |    |    |

| MAY |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|
| S   | M  | T  | W  | T  | F  | S  |
|     |    |    |    |    |    | 1  |
| 2   | 3  | 4  | 5  | 6  | 7  | 8  |
| 9   | 10 | 11 | 12 | 13 | 14 | 15 |
| 16  | 17 | 18 | 19 | 20 | 21 | 22 |
| 23  | 24 | 25 | 26 | 27 | 28 | 29 |
| 30  | 31 |    |    |    |    |    |

| JUNE |    |    |    |    |    |    |
|------|----|----|----|----|----|----|
| S    | M  | T  | W  | T  | F  | S  |
|      |    |    |    |    |    | 1  |
| 2    | 3  | 4  | 5  | 6  | 7  | 8  |
| 9    | 10 | 11 | 12 | 13 | 14 | 15 |
| 16   | 17 | 18 | 19 | 20 | 21 | 22 |
| 23   | 24 | 25 | 26 | 27 | 28 | 29 |
| 30   |    |    |    |    |    |    |

| JULY |    |    |    |    |    |    |
|------|----|----|----|----|----|----|
| S    | M  | T  | W  | T  | F  | S  |
|      |    |    |    |    |    | 1  |
| 2    | 3  | 4  | 5  | 6  | 7  | 8  |
| 9    | 10 | 11 | 12 | 13 | 14 | 15 |
| 16   | 17 | 18 | 19 | 20 | 21 | 22 |
| 23   | 24 | 25 | 26 | 27 | 28 | 29 |
| 30   | 31 |    |    |    |    |    |

| AUGUST |    |    |    |    |    |    |
|--------|----|----|----|----|----|----|
| S      | M  | T  | W  | T  | F  | S  |
|        |    |    |    |    |    | 1  |
| 2      | 3  | 4  | 5  | 6  | 7  | 8  |
| 9      | 10 | 11 | 12 | 13 | 14 | 15 |
| 16     | 17 | 18 | 19 | 20 | 21 | 22 |
| 23     | 24 | 25 | 26 | 27 | 28 | 29 |
| 30     |    |    |    |    |    |    |

| SEPTEMBER |    |    |    |    |    |    |
|-----------|----|----|----|----|----|----|
| S         | M  | T  | W  | T  | F  | S  |
|           |    |    |    |    |    | 1  |
| 2         | 3  | 4  | 5  | 6  | 7  | 8  |
| 9         | 10 | 11 | 12 | 13 | 14 | 15 |
| 16        | 17 | 18 | 19 | 20 | 21 | 22 |
| 23        | 24 | 25 | 26 | 27 | 28 | 29 |
| 30        |    |    |    |    |    |    |

| OCTOBER |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| S       | M  | T  | W  | T  | F  | S  |
|         |    |    |    |    |    | 1  |
| 2       | 3  | 4  | 5  | 6  | 7  | 8  |
| 9       | 10 | 11 | 12 | 13 | 14 | 15 |
| 16      | 17 | 18 | 19 | 20 | 21 | 22 |
| 23      | 24 | 25 | 26 | 27 | 28 | 29 |
| 30      | 31 |    |    |    |    |    |

| NOVEMBER |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|
| S        | M  | T  | W  | T  | F  | S  |
|          |    |    |    |    |    | 1  |
| 2        | 3  | 4  | 5  | 6  | 7  | 8  |
| 9        | 10 | 11 | 12 | 13 | 14 | 15 |
| 16       | 17 | 18 | 19 | 20 | 21 | 22 |
| 23       | 24 | 25 | 26 | 27 | 28 | 29 |
| 30       |    |    |    |    |    |    |

| DECEMBER |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|
| S        | M  | T  | W  | T  | F  | S  |
|          |    |    |    |    |    | 1  |
| 2        | 3  | 4  | 5  | 6  | 7  | 8  |
| 9        | 10 | 11 | 12 | 13 | 14 | 15 |
| 16       | 17 | 18 | 19 | 20 | 21 | 22 |
| 23       | 24 | 25 | 26 | 27 | 28 | 29 |
| 30       | 31 |    |    |    |    |    |

*In recognition of the fact that the University of Victoria is a diverse community, a list of religious festivals has been made available on "Gopher" for the information of faculty, students and staff. Although only the Christian holidays are statutory holidays within the province of British Columbia, faculty and staff may wish to refer to this list in responding to requests from members of religious groups for variations in examination schedules due to religious observances.*

## WINTER SESSION — FIRST TERM

### September 1995

- 4 Monday Labour Day.\*
- 5 Tuesday Beginning of Professional Years in Education (except Special Music Secondary).  
No registration in the Professional Years in Education will be accepted after this date.
- 5 Tuesday Only day for registration in Faculty of Law.
- 6 Wednesday Classes begin in Faculty of Law.
- 6 Wednesday First term classes begin (except as above).
- 15 Friday Last day for course changes in Faculty of Law.
- 19 Tuesday Last day for 100% reduction of tuition fees (see page 26, paragraph 8).
- 22 Friday Last day of period for adding courses which begin in the first term.
- 30 Saturday Last day for paying first term fees without penalty.

### October 1995

- 4 Wednesday Senate meets.
- 9 Monday Thanksgiving Day.\*
- 10 Tuesday Last day for 50% reduction of tuition fees (see page 26, paragraph 8).
- 31 Tuesday Last day for withdrawing from first term courses without penalty of failure.

### November 1995

- 1 Wednesday Senate meets.
- 11 Saturday Remembrance Day.\*
- 13 Monday Holiday in lieu of Nov. 11.\*
- 13 Monday Reading Break (except Law).\*
- 14 Tuesday Reading Break (except Law).\*
- 15 Wednesday Reading Break (except Law).\*
- 25 Saturday Fall Convocation.

### December 1995

- 5 Tuesday Last day of classes in first term (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).
- 6 Wednesday Ecole Polytechnique Memorial Ceremony — classes cancelled 11:30 am to 12:30 pm.
- 6 Wednesday Senate meets.
- 7 Thursday First term examinations begin (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).
- 21 Thursday First term examinations end. End of first term, all faculties.
- 25 Monday Statutory holiday.\*
- 26 Tuesday Statutory holiday.\*
- 25-31 University closed.



| JANUARY |    |    |    |    |    |    | FEBRUARY |    |    |    |    |    |    | MARCH |    |    |    |    |    |    | APRIL |    |    |    |    |    |    | MAY |    |    |    |    |    |    | JUNE |  |  |  |  |  |  |
|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|-------|----|----|----|----|----|----|-------|----|----|----|----|----|----|-----|----|----|----|----|----|----|------|--|--|--|--|--|--|
| S       | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  | S     | M  | T  | W  | T  | F  | S  | S     | M  | T  | W  | T  | F  | S  | S   | M  | T  | W  | T  | F  | S  |      |  |  |  |  |  |  |
| 1       | 2  | 3  | 4  | 5  | 6  |    |          |    |    |    |    | 1  | 2  | 3     |    |    |    |    |    |    |       | 1  | 2  | 3  | 4  | 5  | 6  | 7   |    |    |    |    |    |    |      |  |  |  |  |  |  |
| 7       | 8  | 9  | 10 | 11 | 12 | 13 | 4        | 5  | 6  | 7  | 8  | 9  | 10 | 4     | 5  | 6  | 7  | 8  | 9  | 10 | 8     | 9  | 10 | 11 | 12 | 13 | 14 | 15  | 16 | 17 | 18 | 19 | 20 | 21 |      |  |  |  |  |  |  |
| 14      | 15 | 16 | 17 | 18 | 19 | 20 | 11       | 12 | 13 | 14 | 15 | 16 | 17 | 11    | 12 | 13 | 14 | 15 | 16 | 17 | 15    | 16 | 17 | 18 | 19 | 20 | 21 | 22  | 23 | 24 | 25 | 26 | 27 | 28 |      |  |  |  |  |  |  |
| 21      | 22 | 23 | 24 | 25 | 26 | 27 | 18       | 19 | 20 | 21 | 22 | 23 | 24 | 18    | 19 | 20 | 21 | 22 | 23 | 24 | 22    | 23 | 24 | 25 | 26 | 27 | 28 | 29  | 30 |    |    |    |    |    |      |  |  |  |  |  |  |
| 28      | 29 | 30 | 31 |    |    |    | 25       | 26 | 27 | 28 |    |    |    | 25    | 26 | 27 | 28 | 29 | 30 | 31 | 29    | 30 |    |    |    |    |    |     |    |    |    |    |    |    |      |  |  |  |  |  |  |

| JULY |    |    |    |    |    |    | AUGUST |    |    |    |    |    |    | SEPTEMBER |    |    |    |    |    |    | OCTOBER |    |    |    |    |    |    | NOVEMBER |    |    |    |    |    |    | DECEMBER |  |  |  |  |  |  |
|------|----|----|----|----|----|----|--------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|----------|--|--|--|--|--|--|
| S    | M  | T  | W  | T  | F  | S  | S      | M  | T  | W  | T  | F  | S  | S         | M  | T  | W  | T  | F  | S  | S       | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  |          |  |  |  |  |  |  |
| 1    | 2  | 3  | 4  | 5  | 6  | 7  |        |    |    |    |    | 1  | 2  | 3         | 4  |    |    |    |    |    |         | 1  | 2  | 3  | 4  | 5  | 6  | 7        |    |    |    |    |    |    |          |  |  |  |  |  |  |
| 8    | 9  | 10 | 11 | 12 | 13 | 14 | 5      | 6  | 7  | 8  | 9  | 10 | 11 | 12        | 13 | 14 | 15 | 16 | 17 | 18 | 19      | 20 | 21 | 22 | 23 | 24 | 25 | 26       | 27 | 28 | 29 | 30 | 31 |    |          |  |  |  |  |  |  |
| 15   | 16 | 17 | 18 | 19 | 20 | 21 | 12     | 13 | 14 | 15 | 16 | 17 | 18 | 12        | 13 | 14 | 15 | 16 | 17 | 18 | 16      | 17 | 18 | 19 | 20 | 21 | 22 | 23       | 24 | 25 | 26 | 27 | 28 | 29 |          |  |  |  |  |  |  |
| 22   | 23 | 24 | 25 | 26 | 27 | 28 | 19     | 20 | 21 | 22 | 23 | 24 | 25 | 16        | 17 | 18 | 19 | 20 | 21 | 22 | 20      | 21 | 22 | 23 | 24 | 25 | 26 | 27       | 28 | 29 | 30 |    |    |    |          |  |  |  |  |  |  |
| 29   | 30 | 31 |    |    |    |    | 26     | 27 | 28 | 29 | 30 | 31 |    | 23        | 24 | 25 | 26 | 27 | 28 | 29 | 28      | 29 | 30 | 31 |    |    |    |          |    |    |    |    |    |    |          |  |  |  |  |  |  |

| JULY |    |    |    |    |    |    | AUGUST |    |    |    |    |    |    | SEPTEMBER |    |    |    |    |    |    | OCTOBER |    |    |    |    |    |    | NOVEMBER |    |    |    |    |    |    | DECEMBER |  |  |  |  |  |  |
|------|----|----|----|----|----|----|--------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|----------|--|--|--|--|--|--|
| S    | M  | T  | W  | T  | F  | S  | S      | M  | T  | W  | T  | F  | S  | S         | M  | T  | W  | T  | F  | S  | S       | M  | T  | W  | T  | F  | S  | S        | M  | T  | W  | T  | F  | S  |          |  |  |  |  |  |  |
| 1    | 2  | 3  | 4  | 5  | 6  | 7  |        |    |    |    |    | 1  | 2  | 3         | 4  | 5  | 6  | 7  | 8  | 9  | 1       | 2  | 3  | 4  | 5  | 6  | 7  | 8        | 9  | 10 | 11 | 12 | 13 | 14 |          |  |  |  |  |  |  |
| 8    | 9  | 10 | 11 | 12 | 13 | 14 | 5      | 6  | 7  | 8  | 9  | 10 | 11 | 2         | 3  | 4  | 5  | 6  | 7  | 8  | 7       | 8  | 9  | 10 | 11 | 12 | 13 | 14       | 15 | 16 | 17 | 18 | 19 | 20 | 21       |  |  |  |  |  |  |
| 15   | 16 | 17 | 18 | 19 | 20 | 21 | 12     | 13 | 14 | 15 | 16 | 17 | 18 | 9         | 10 | 11 | 12 | 13 | 14 | 15 | 14      | 15 | 16 | 17 | 18 | 19 | 20 | 21       | 22 | 23 | 24 | 25 | 26 | 27 | 28       |  |  |  |  |  |  |
| 22   | 23 | 24 | 25 | 26 | 27 | 28 | 19     | 20 | 21 | 22 | 23 | 24 | 25 | 16        | 17 | 18 | 19 | 20 | 21 | 22 | 21      | 22 | 23 | 24 | 25 | 26 | 27 | 28       | 29 | 30 | 31 |    |    |    |          |  |  |  |  |  |  |
| 29   | 30 | 31 |    |    |    |    | 26     | 27 | 28 | 29 | 30 | 31 |    | 23        | 24 | 25 | 26 | 27 | 28 | 29 | 28      | 29 | 30 | 31 |    |    |    |          |    |    |    |    |    |    |          |  |  |  |  |  |  |

## WINTER SESSION — SECOND TERM

### January 1996

- 1 Monday New Year's Day.\*
- 2 Tuesday Classes begin in Faculty of Law.
- 8 Monday Second term classes begin in all faculties except Law.
- 10 Wednesday Senate meets.
- 11 Thursday Last day for course changes in Faculty of Law.
- 21 Sunday Last day for 100% reduction of second term fees (see page 26, paragraph 8).
- 24 Wednesday Last day for adding courses which begin in the second term.
- 31 Wednesday Last day for paying second term fees without penalty.

### February 1996

- 7 Wednesday Senate meets.
- 11 Sunday Last day for 50% reduction of tuition fees (see page 26, paragraph 8).
- 19 Monday Reading Break (Faculty of Law only).
- 20 Tuesday Reading Break (Faculty of Law only.)
- 21 Wednesday Reading Break (all faculties).\*
- 22 Thursday Reading Break (all faculties).\*
- 23 Friday Reading Break (all faculties).\*
- 29 Tuesday Last day for withdrawing from full year and second term courses without penalty of failure.

### March 1996

- 6 Wednesday Senate meets.

### April 1996

- 3 Wednesday Senate meets.
- 4 Thursday Last day of classes in the second term (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).
- 5 Friday Statutory holiday.\*
- 8 Monday Statutory holiday.\*
- 9 Tuesday Examinations begin (except for Faculty of Human and Social Development, Faculty of Law, and Professional Years in Faculty of Education, to be announced).
- 25 Thursday End of examinations for all faculties. End of Winter Session (except for Professional Years in Faculty of Education, see below).

### MAY-AUGUST 1996

(see Summer Studies supplement for complete dates)

#### May 1996

- 1 Wednesday Earliest date on which Summer Studies courses begin.
- 1 Wednesday Senate meets.
- 6 Monday May-August courses begin.
- 13 Monday May and May-June first term courses begin.
- 10 Friday Last day of final practicum for Professional Years (regular programs) in Faculty of Education.
- 22 Wednesday Special Senate meeting (tentative).
- 20 Monday Victoria Day.\*
- 30 Thursday Spring Convocation. (tentative)
- 31 Friday Spring Convocation. (tentative)

#### June 1996

- 1 Saturday Spring Convocation. (tentative)
- 5 Wednesday May courses end.
- 6 Thursday June courses begin.
- 28 Friday May-June and June courses end.

#### July 1996

- 1 Monday Canada Day.\*
- 1 Monday Reading Break, May-August courses.
- 2 Tuesday Reading Break, May-August courses.
- 3 Wednesday July and July-August courses begin.
- 25 Thursday July courses end.
- 26 Friday August courses begin.
- 29-31 Supplemental and deferred examinations for Winter Session 1995-96 begin.

#### August 1996

- 2 Friday May-August classes end.
- 5 Monday British Columbia Day.\*
- 6 Tuesday May-August examinations begin.
- 16 Friday May-August examinations end.
- 20 Tuesday July-August and August courses end. End of Summer Studies.

\* Classes are cancelled on all holidays and during reading breaks. Administrative offices and academic departments are closed on holidays. Holidays which fall on a weekend are observed on the next available weekday, normally a Monday. The UVic Libraries are normally closed on holidays; exceptions are posted.



# GENERAL INFORMATION

## HISTORICAL OUTLINE

The University of Victoria came into being on July 1, 1963, but it had enjoyed a prior tradition as Victoria College of sixty years distinguished teaching at the university level. This sixty years of history may be viewed conveniently in three distinct stages.

Between the years 1903 and 1915, Victoria College was affiliated with McGill University, offering first and second year McGill courses in Arts and Science. Administered locally by the Victoria School Board, the College was an adjunct to Victoria High School and shared its facilities. Both institutions were under the direction of a single Principal: E.B. Paul, 1903-1908; and S.J. Willis, 1908-1915. The opening in 1915 of the University of British Columbia, established by Act of Legislature in 1908, obliged the College to suspend operations in higher education in Victoria.

In 1920, as a result of local demands, Victoria College began the second stage of its development, reborn in affiliation with the University of British Columbia. Though still administered by the Victoria School Board, the College was now completely separated from Victoria High School, moving in 1921 into the magnificent Dunsmuir mansion known as Craigdarroch. Here, under Principals E.B. Paul and P.H. Elliott, Victoria College built a reputation over the next two decades for thorough and scholarly instruction in first and second year Arts and Science.

The final stage, between the years 1945 and 1963, saw the transition from two year college to university, under Principals J.M. Ewing and W.H. Hickman. During this period, the College was governed by the Victoria College Council, representative of the parent University of British Columbia, the Greater Victoria School Board, and the provincial Department of Education. Physical changes were many. In 1946 the College was forced by postwar enrollment to move from Craigdarroch to the Lansdowne campus of the Provincial Normal School. The Normal School, itself an institution with a long and honourable history, joined Victoria College in 1956 as its Faculty of Education. Late in this transitional period (through the cooperation of the Department of National Defence and the Hudson's Bay Company) the 284 (now 385) acre campus at Gordon Head was acquired. Academic expansion was rapid after 1956, until in 1961 the College, still in affiliation with U.B.C. awarded its first bachelor's degrees.

In granting autonomy to the University of Victoria, the *University Act* of 1963 vested administrative authority in a Chancellor elected by the Convocation of the University, a Board of Governors, and a President appointed by the Board; academic authority was given to a Senate which was representative both of the Faculties and of the Convocation.

The historical traditions of the University are reflected in the Arms of the University, its academic regalia and its house flag. The B.A. hood is of solid red, a colour that recalls the early affiliation with McGill. The B.Sc. hood, of gold, and the B.Ed. hood, of blue, show the colours of the University of British Columbia. Blue and gold have been retained as the official colours of the University of Victoria. The motto at the top of the Arms of the University, in Hebrew characters, is 'Let there be Light'; the motto at the bottom, in Latin, is 'A Multitude of the Wise is the Health of the World.'

## UNIVERSITY REGALIA

### Visitor

|                  |   |
|------------------|---|
| <i>Gown</i>      | royal blue wool broadcloth, trimmed with gold silk taffeta. |
| <i>Headdress</i> | black velvet mortarboard, trimmed with gold braid.          |

### Chancellor

|                  |  |
|------------------|--|
| <i>Gown</i>      | purple corded silk, trimmed with purple velvet and gold braid. |
| <i>Headdress</i> | black velvet mortarboard, trimmed with gold braid.             |

### President

|                  |  |
|------------------|--|
| <i>Gown</i>      | royal blue corded silk, trimmed with blue velvet and gold braid. |
| <i>Headdress</i> | black velvet mortarboard, trimmed with gold braid.               |

### Board of Governors

#### Chairman

|                  |   |
|------------------|---|
| <i>Gown</i>      | traditional (Canadian) Bachelor's style in black wool blend with front facings and sleeve linings in gold silk. |
| <i>Headdress</i> | black cloth mortarboard, with black silk tassel.  |
| <i>Member</i>    | headdress and gown as above, but with front facings in black.   |

### Honorary Doctorate of Laws (Hon. LL.D.)

|                  |  |
|------------------|--|
| <i>Gown</i>      | Cambridge (Doctor of Music) pattern, scarlet wool broadcloth, trimmed with blue-purple silk taffeta. |
| <i>Hood</i>      | Aberdeen pattern, outside shell of scarlet wool broadcloth, lined with blue-purple silk taffeta.     |
| <i>Headdress</i> | Tudor style in black velvet with red cord trim.  |

### Honorary Doctorate

|                  |  |
|------------------|--|
| <i>Gown</i>      | Cambridge (Doctor of Music) pattern, scarlet wool, front facings and sleeve lining of black silk taffeta.  |
| <i>Hood</i>      | Aberdeen pattern, outside shell of black wool, lined with silk taffeta in a solid colour with a one inch band of black velvet on the outside edge.<br>Hon.D. Litt. — white    Hon.D.Mus. — pink<br>Hon.D.Ed. — blue    Hon.D.Sc. — gold<br>Hon.D.Eng. — orange    Hon.D.S.N. — apricot<br>Hon.D.F.A. — green |
| <i>Headdress</i> | Tudor style in black velvet with red cord trim.  |

### Bachelors

|             |   |
|-------------|---|
| <i>Gown</i> | traditional (Canadian) Bachelor's style, in black.  |
| <i>Hood</i> | Aberdeen pattern (B.A., B.Sc., and B.Ed., without neckband and finished with two cord rosettes; all others with mitred neckpiece), outside shell of silk taffeta in a solid colour, lined with identical material. Faculty colours are as follows:<br>B.A. — scarlet    B.F.A. — green<br>B.Com. — burgundy    B.Mus. — pink<br>B.Sc. — gold    B.S.N. — apricot<br>B.Ed. — blue    B.S.W. — citron<br>B.Eng. — orange    LL.B. — blue-purple |

|                  |  |
|------------------|--|
| <i>Headdress</i> | standard black cloth mortarboard with black silk tassel. |
|------------------|--|

### Masters

|                  |   |
|------------------|---|
| <i>Gown</i>      | traditional (Canadian) Master's style in black.   |
| <i>Hood</i>      | similar in design and colour to the respective Bachelor's hoods, but with mitred neckpiece and a narrow band of black velvet one inch from edge of hood on the outside only. Others are:<br>M.A.Sc. — orange    M.P.A. — russet |
| <i>Headdress</i> | standard black cloth mortarboard with black silk tassel.  |

### Doctors

|                  |   |
|------------------|---|
| <i>Gown</i>      | Cambridge style, black silk, front facings and sleeve linings of scarlet silk.                  |
| <i>Hood</i>      | Oxford Doctor's Burgon shape, shell of scarlet silk, lined with blue silk, border of gold silk. |
| <i>Headdress</i> | black velvet mortarboard with red tassel fastened on left side.                                 |

NOTE: On ceremonial occasions, participants without degrees wear the standard black undergraduate cap and gown as described above for bachelors.



## GLOSSARY OF UNIVERSITY TERMS

New students will find the following definitions helpful in becoming familiar with terms used in this Calendar.

**Aegrotat** — Literally, "he is ill"; transcript notation accompanying a letter grade assigned where illness or similar affliction affected the student's performance.

**Auditor** — A student who pays a fee to sit in on a course without the right to participate in any way. Auditors are not entitled to credit. (See page 14.)

**Award** — See list of definitions under Scholarships and Awards.

**Chair** — In the Academic Regulations in the section under General Information, this means the Chair of a Department, the Director of a School, Centre or Program, and in the case of Law students, the Dean of the Faculty.

**Convocation** — Academic assembly; body composed primarily of graduates of the University.

**Corequisite** — A specific course or requirement which must be undertaken at the same time as a prescribed course.

**Course** — A particular part of a subject studied, such as English 121.

**Credit Unit** — Positive numerical value used in assigning the value of a course, such as Economics 100 (3 units).

**Department** — In academic regulations, this covers any academic administrative unit, including a department, school, centre, program or Faculty as the context requires.

**Discipline** — A subject of study within a department.

**Full Time Student** — An undergraduate student undertaking 12 or more units of study in the Winter Session.\*

**Grade Point** — Positive numerical value given to an alphabetical letter grade used in assessment of academic performance.

**Graduate Student** — A student who has received a Bachelor's degree or equivalent and who is enrolled in a program leading to a Master's or Doctoral degree.

**Letter Grade** — Any of the letters used in the grading system shown under Academic Regulations.

**Lower Level Courses** — Courses numbered from 100 to 299.

**Major** — The subject or area of specialization or emphasis in a degree program.

**Part Time Student** — An undergraduate student undertaking fewer than 12 units of study in the Winter Session.\*

**Plagiarism** — A form of cheating by means of the unacknowledged, literal reproduction of ideas and material of other persons in the guise of new and original work. See Statement on Cheating, page 18.

**Prerequisite** — A preliminary requirement which must be met before registration in a prescribed course.

**Probation** — A period of trial for a student whose registration is subject to academic conditions.

**Program** — The courses of study organized to fulfill an academic objective, such as a B.Sc. program.

**Registration** — The process of formally enrolling in courses.

**Regular Student** — A student who is registered as a candidate for a University of Victoria degree, or in credit courses leading to a University of Victoria Diploma.

**Section** — The division of a course, e.g. Section Y01 of French 100.

**Session** — Designated period of time during which courses of study are offered, i.e., Winter Session, Summer Session.

**Special Student** — A student who is admitted to credit courses but who is not a candidate for a University of Victoria degree or diploma.

**Student** — A person who is enrolled in at least one credit course at this University.

**Term** — A period of time in the academic year: a term in the Winter Session consists of 13 weeks, in the Summer Session, approximately 3 weeks (F = First Term; S = Second Term).

**Transcript** — A copy of a student's permanent academic record.

**Transfer Credit** — Credit for courses at the postsecondary level.

**Undergraduate Student** — A student registered in an undergraduate faculty or in a program leading to a Bachelor's degree or an undergraduate diploma.

**Unclassified** — Refers to the year in which certain students are registered.

**Upper Level Courses** — Courses numbered from 300 to 499.

**Year** — A minimum of 15 units of courses; the level within a program of study or the level of a course, e.g., First Year student, First Year course (Physics 110).

\* See Faculty of Graduate Studies for graduate students.

## CALENDAR CHANGES

The official academic year begins on July 1. Changes in Calendar regulations normally take effect with the beginning of the Winter Session in September each year. Nevertheless the University reserves the right to revise or cancel at any time any rule or regulation published in the Calendar or its supplements.

## ACADEMIC SESSIONS

The Winter Session is divided into two terms — the first, September to December; the second, January to April. The period May through August is administered under Summer Studies. The Calendar Supplement for Summer Studies is published separately. A list of credit courses offered in the late afternoon and evening is also published separately. (See inside front cover.)

## PROGRAMS OFFERED

The University offers the following degrees through the Faculty of Arts and Science, the Faculty of Business, the Faculty of Education, the Faculty of Engineering, the Faculty of Fine Arts, the Faculty of Graduate Studies, the Faculty of Human and Social Development, the Faculty of Law: Bachelor of Arts; Bachelor of Commerce; Bachelor of Education (Elementary or Secondary Curriculum); Bachelor of Engineering; Bachelor of Fine Arts; Bachelor of Laws; Bachelor of Music; Bachelor of Science; Bachelor of Science in Nursing; Bachelor of Social Work; Master of Arts; Master of Applied Science; Master of Business Administration; Master of Education; Master of Engineering; Master of Fine Arts; Master of Music; Master of Nursing; Master of Public Administration; Master of Science; Master of Social Work; Doctor of Philosophy. Also offered are degree programs in Education for graduates seeking teacher certification, a Diploma Program in Public Sector Management, and Diploma Programs in Applied Linguistics, Cultural Conservation, Fine Arts, French Language, Humanities, and Teacher Librarianship; all of which are credit programs. Programs leading to a Certificate in Kodaly Methodology (Faculty of Education), a Certificate in the Administration of Aboriginal Governments (Faculty of Human and Social Development), and a Certificate in Native Indian Creative Writing (Faculty of Fine Arts) are also offered.

### Cooperative Education Program:

The University offers students in certain programs the opportunity to undertake studies involving work in industry, government or some professions. See page 38.

## ACADEMIC ADVICE

In choosing undergraduate degree programs, students are strongly urged to consult the Calendar prescriptions for the degree program desired. Advice may be obtained from the advising centres and departments of the faculties.

Students who register in the Faculty of Arts and Science or the Faculty of Fine Arts and who intend to undertake studies at a later date in the Faculty of Education or the Faculty of Business should plan their programs with this in mind. Advice may be obtained from the Advising Centre of the Faculty of Education or main reception at the Faculty of Business. Similarly, academic advice about the professional programs in the Faculty of Human and Social Development is available from faculty members of the appropriate school, on an appointment basis.



## PREPROFESSIONAL STUDIES

Students who intend to complete a year or two of studies and then transfer to another university are urged to design their program so that they will meet the requirements of the other institution they plan to attend. In this connection, by proper selection of First Year courses in Arts and Science, students may equip themselves to enter the first year of Forestry, and the second year of Agriculture, Physical Education, Pharmacy, at certain other universities. Courses preparatory to Medicine, Dentistry, Architecture, etc., may be taken at the University for studies elsewhere. See page 35, Preprofessional Education. Advice may be obtained from the Advising Centre of the Faculty of Arts and Science.

## CAREER INFORMATION AND VOCATIONAL COUNSELLING

The University recognizes the importance of career planning and decision making, and all students are urged to investigate and explore career opportunities early in their University stay, especially those relating to their academic studies. The Counselling Services, the Student Employment Centre, and the Alumni Association are available to students with career questions and concerns. A detailed description of these services appears on pages 28, 30 and 33, respectively.

## ENTRANCE AWARDS AND FINANCIAL AID

The University offers a number of scholarships to students entering from senior secondary schools in British Columbia. Details about these awards and other entrance awards offered by agencies outside the University are found on page 286. Application forms may be obtained from the office of the Administrative Registrar.

Financial aid schemes open to all students attending the University are described under Financial Aid at the back of the Calendar. Information in regard to financial aid may be obtained from the Student Financial Aid Office, whose personnel will be pleased to give whatever advice and assistance they can.

## STUDENTS WITH DISABILITIES

The Coordinator of Special Student Programs is available to help any students with a disability maximize their participation in university life. Students with a disability should see the Coordinator to discuss ways in which they may best be aided before the beginning of term.

The Coordinator, Special Student Programs may be reached at:

University of Victoria

P.O. Box 3025

Victoria, B.C.

V8W 3P2

Tel: 604 721-8743 Fax: 604 721-6610

For further details on services for students with a disability please see "Services for Students with a Disability" on page 31.

## ABORIGINAL LIAISON

The Aboriginal Liaison Officer (721-6326) acts as the University's major contact with Aboriginal/First Nations students including the Native Student Union.

The office will assist students on academic, funding and cultural matters. Liaison activities with Academic/Counselling departments within the University and within the general community will be undertaken.

The office will also provide some academic assistance/referral, arrange student workshops and assist with the promotion and coordination of special events about Aboriginal culture and traditions.

## LIMITATION OF ENROLLMENT

The University reserves the right to limit enrollment, and to limit the registration in, or to cancel or revise, any of the courses listed. The curricula may also be changed, as deemed advisable by the Senate of the University.

Except in special circumstances, no student under the age of sixteen may be admitted to the First Year, or under the age of seventeen to the Second Year.

## PROTECTION OF PRIVACY AND ACCESS TO INFORMATION

The University of Victoria gathers and maintains information used for the purposes of admission, registration and other fundamental activities related to being a member of the University of Victoria community, including its alumni, and attending a public post-secondary institution in the Province of British Columbia. In signing an application for admission, all applicants are advised that both the information they provide and any other information placed into the student record will be protected and used in compliance with the BC Freedom of Information and Privacy Protection Act (1992).

## LIMIT OF RESPONSIBILITY

The University of Victoria accepts no responsibility for the interruption or continuance of any class or course of instruction as a result of an act of God, fire, riot, strike, or any cause beyond the control of the University of Victoria.

## CATEGORIES OF STUDENTS

Each student who has been authorized to register in a faculty other than Graduate Studies is designated as one of the following:

1. Regular student — A student admitted to credit courses as a candidate for a degree or diploma.
2. Special student — A student admitted to credit courses but not a candidate for a degree or diploma.

For categories of graduate students, see Faculty of Graduate Studies.

## CLASSIFICATION OF UNDERGRADUATES BY YEAR

Classification of Regular Students by Year is normally based on the number of units completed, as follows:

|                   |                               |
|-------------------|-------------------------------|
| Below 12 units    | First Year                    |
| 12 to 26½ units   | Second Year                   |
| 27 to 41½ units   | Third Year                    |
| 42 units or above | Fourth Year (4 year programs) |
| 42 to 56½ units   | Fourth Year (B.Ed only)       |
| 57 units or above | Fifth Year (B.Ed only)        |

Special Students are unclassified as to Year.

## COURSE VALUES AND HOURS

Each course which is offered for credit has a unit value. A full course normally has a value of 3 units. In the course outline given in each of the faculties, the number of units assigned to each course is given in brackets immediately following the course number. Thus ANTH 305(1½) indicates that Anthropology 305 has a value of 1½ units.

The hours assigned for lectures or seminars, laboratory or practical sessions and tutorials in a course are indicated in the following examples:

- (3-0) — 3 hours lecture/seminar per week.
- (2-1) — 2 hours lecture/seminar and 1 hour laboratory or practical session per week
- (3-0-1) — 3 hours lecture/seminar and 1 hour tutorial per week

Codes found in course listings show the duration of courses:

F = September-December

S = January-April

Y = September-April

K = May-August\*

NO = Not offered

\*See Summer Studies calendar for codes applicable to shorter courses offered in the period May through August.

## LECTURE AND LABORATORY SCHEDULE

The schedule of classes for the Winter Session is published in early June.



## UNDERGRADUATE ADMISSION

Each applicant who is applying for admission to the university is required to furnish the information necessary for the University record and to sign the following declaration:

*I hereby accept and submit myself to the statutes, rules, regulations, and ordinances of the University of Victoria as authorized by the Senate and the Board of Governors, and of the Faculty in which in due course I shall be registered, and to any amendments thereto which may be made while I am a student of the University, and I promise to observe the same.*

Inquiries relating to admission to the Faculty of Graduate Studies should be addressed to the Graduate Admission and Records Office, Main Floor, University Centre; for the Faculty of Law, inquiries should be addressed to Law Admissions Officer, Faculty of Law, Begbie Building.

All inquiries relating to admission to faculties other than Graduate Studies and Law should be addressed to Admission Services, Main Floor, University Centre. Details follow:

### ADMISSION REQUIREMENTS

The following regulations notwithstanding, the University reserves the right to reject applicants for admission on the basis of their overall academic records, even if they technically meet entrance requirements. Possession of the minimum requirements does not guarantee admission to any Faculty, program or course at the University. In those instances where the number of qualified applicants exceeds the number that can be accommodated, the admission cut-offs will be higher than the minimum requirements.

Normally, applicants must have fulfilled the requirements listed below by June, and all required documents must have arrived in Admission Services by the deadline specified by the Department or Faculty; consult Faculty and Department regulations. Files becoming complete after the specified deadline will not normally be processed.

Additional requirements for admission to specific programs offered by the faculties of the University are shown in the chart on the next page. Individual departments may have set higher standards for entry than the minimum published; consult Faculty and departmental regulations.

The University reserves the right at any time to set enrollment limits in any Faculty or program, and to establish admission criteria above and beyond the minimum requirements set down in the Calendar. The following averages were required for admission to Winter Session 1994-95:

|  |     |
|--|-----|
| B.C. Grade 12                                    | 70% |
| B.C. College and University Transfers            | 60% |
| Secondary School Graduates from Other Provinces  | 70% |
| Transfers from Universities from Other Provinces | 65% |

### ENTRY TO YEAR ONE

The general requirements listed below apply to the Faculties of Arts and Science, Fine Arts and Engineering only. For admission requirements to the Faculties of Human and Social Development and Education refer to Faculty and Department regulations.

#### 1.0 British Columbia and Yukon Secondary School Graduates

##### Faculty of Arts & Science

The requirement is graduation from senior secondary school as prescribed by the Ministry of Education of the Province of British Columbia, including:

- successful completion of Mathematics 11, English 11, Social Studies 11, a science 11 and a second language 11 (see below for approved science and language subjects) and
- a minimum overall 67% (2.5 on a four point scale) average in English 12 and three additional academic 12 level subjects selected from the Curriculum Reference Chart as approved by the Ministry of Education. Acceptable subjects are Biology 12, Chemistry 12, Computer Science 12, Française 12, French 12, Geography 12, Geometry 12, German 12, History 12, Japanese 12, Latin 12, Literature 12, Mandarin 12, Mathematics 12, Physics 12, Probability and Statistics 12, Spanish 12, Survey Mathematics 12, Western Civilization 12. Grade 12 Provincial Examinations must be written in each subject presented for admission if the examination was available in

the year in which the subject was taken. Some locally developed courses have also been approved by the University for admission purposes.

*Only one approved non-provincially examinable course (e.g. Western Civilization 12) may be used for admission.\**

\* This restriction will not be imposed until 1996-97 Winter Session.

Acceptable Science 11 subjects are Biology 11, Chemistry 11, Computer Science 11, Earth Science 11, and Physics 11.

Acceptable language 11 subjects are Française 11, French 11, German 11, Japanese 11, Latin 11, Mandarin 11, Spanish 11. A beginners language 11 will not be accepted in place of a language 11 course. Applicants who wish to substitute a locally developed (LD) language subject for the language 11 requirement must arrange through the Principal to have an outline submitted for evaluation by Admission Services.

Applicants whose first language is not English may apply for an exemption from the language 11 requirement. Such applicants will be required to demonstrate written and verbal fluency in their native language by passing a test provided by the University. Applications for language testing may be obtained from Admission Services. Testing is not available for all languages.

##### Faculty of Fine Arts

The requirement is secondary school graduation as above including: Successful completion of English 11, Social Studies 11, and THREE of the following: an approved fine arts 11 course, a language 11 course, a science 11 course, Mathematics 11; and

A minimum overall 67% average calculated on English 12 and three academic courses selected as above or English 12 plus two academic courses selected as above and one approved fine arts 12 elective.

Additional requirements such as portfolio, questionnaire or audition may be required. Refer to Faculty and Department regulations for more details.

##### Faculty of Engineering

Applicants for the B.Eng program must meet admission requirements as for the Faculty of Arts and Science including a grade of not less than 73% in Mathematics 12 (or Algebra 12) and Physics 12. Chemistry 11 or 12 is also required.

#### 2.0 Graduates of Secondary Schools in Alberta, Saskatchewan, Manitoba, New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland, The Northwest Territories

Applicants from these provinces require secondary school graduation including:

Successful completion of the equivalent of Mathematics 11 (academic), English 11, social science 11 (such as History, Geography, etc.), a science 11 and a second language 11.

A minimum overall average equivalent to the British Columbia 67% on the equivalent of English 12 and three additional Grade 12 level academic subjects.

#### 3.0 Graduates of Secondary Schools in Ontario

Applicants from Ontario require completion of the Ontario Secondary School Honours Diploma (OSSHD) including a minimum of 6 Ontario Academic Courses (or grade 13 courses) with an overall average of at least 67% calculated on the best 5 OAC's and English OAC. Transfer credit will not be awarded for the OACs. Applicants with the Ontario Secondary School Diploma (OSSD) will be evaluated on an individual basis.

#### 4.0 CEGEP — Quebec

Applicants who have completed more than two full time semesters at a collège d'enseignement générale et professionnel (CEGEP) and who have an overall average of at least 70% may be granted up to 15 units of transfer credit at the first or second year level for those courses completed in subsequent semesters.

#### 5.0 Colleges of Applied Arts and Technology (CAAT)

Applicants require completion of a two year diploma with a minimum overall average of 70% to be eligible for admission to Year One. No transfer credit will be awarded for a two year diploma.



**DEGREE PROGRAM PREREQUISITES† 1995–96**

For the convenience of applicants who have graduated from British Columbia senior secondary schools, the secondary school course requirements specified for programs offered within the faculties and departments or schools of the University are assembled in this chart.

**R = REQUIRED    O = OPTIONAL BUT RECOMMENDED    G = GENERAL ADMISSION REQUIREMENTS**

| DEGREE PROGRAMS<br>(by Faculty and Department or School) | Gen. Adm<br>Req only* | Math<br>12 | Biology<br>11 12 |     | Chemistry<br>11 12 |   | CSc<br>11 | CSc<br>12 | Hist<br>12 | Lit<br>12 | Physics<br>11 12 |   |  |
|--|-----------------------|------------|------------------|-----|--------------------|---|-----------|-----------|------------|-----------|------------------|---|--|
| ARTS AND SCIENCE (see Notes 2 & 5)                       |                       |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Anthropology   |                       | O          | O                |     |                    |   | O         |           |            |           |                  |   |  |
| Astronomy (see Notes 1 & 2)                              |                       | R          |                  |     |                    |   |           |           |            |           | O                | O |  |
| Biochemistry & Microbiology (see Notes 1 & 2)            |                       | R          | O                | O   | R                  | O |           |           |            |           | R                | O |  |
| Biology (see Notes 1 & 2)                                |                       | R          | O/R              | O/R | R                  | O |           |           |            |           | R                | O |  |
| Chemistry (see Notes 1 & 2)                              |                       | R          |                  |     | R                  | O |           |           |            |           | R                | O |  |
| Classics (incl. Greek & Latin) (see Note 2)              | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Commerce (see Note 2)                                    |                       | R          |                  |     |                    |   | O         | O         |            |           |                  |   |  |
| Earth and Ocean Sciences (see Note 1)                    |                       | R          |                  |     | R                  | O |           |           |            |           | R                | O |  |
| Economics (see Note 1)                                   |                       | R          |                  |     |                    |   |           |           |            |           |                  |   |  |
| English  |                       |            |                  |     |                    |   |           |           |            | O         |                  |   |  |
| French Language & Literature (see Note 2)                | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Geography (see Note 2)                                   |                       | O          |                  |     |                    |   |           |           |            |           |                  |   |  |
| Germanic Studies (see Note 2)                            | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Hispanic & Italian Studies (see Note 2)                  | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| History (see Note 2)                                     |                       |            |                  |     |                    |   |           |           | O          | O         |                  |   |  |
| Linguistics (B.A.) (see Note 2)                          |                       | O          |                  |     |                    |   | O         | O         |            |           |                  |   |  |
| Linguistics (B.Sc.) (see Note 2)                         |                       | R          | O                |     |                    |   | O         | O         |            |           | O                |   |  |
| Mathematics & Statistics (see Note 2)                    |                       | R          |                  |     |                    |   |           |           |            |           |                  |   |  |
| Pacific & Asian Studies (see Note 2)                     | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Philosophy (see Note 2)                                  | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Physics (see Notes 1 & 2)                                |                       | R          |                  |     | O                  | O |           |           |            |           | R                | O |  |
| Political Science  |                       | O          |                  |     |                    |   |           |           |            |           |                  |   |  |
| Psychology   |                       | R          |                  | O   |                    |   |           |           | O          | O         |                  |   |  |
| Slavonic Studies (see Note 2)                            | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Sociology  |                       | O          |                  |     |                    |   | O         |           |            |           |                  |   |  |
| Women's Studies (see Note 2)                             | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| EDUCATION (see Note 4)                                   |                       |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Education (Elem)   |                       |            | O                |     |                    |   |           |           |            | O         | O                |   |  |
| Education (Sec) (PE, Art, Music only)                    | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Physical Education                                       |                       |            | O                |     | O                  |   |           |           |            | O         | O                |   |  |
| Kinesiology (BA)   |                       |            | O                |     | O                  |   |           |           |            | O         | O                |   |  |
| Kinesiology (B.Sc) (see Note 2)                          |                       | R          | O                | O   | R                  | O |           |           |            | O         | O                |   |  |
| Leisure Studies (see Note 2)                             |                       |            | O                |     | O                  |   |           |           |            | O         | O                |   |  |
| ENGINEERING  |                       |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Computer Science (see Notes 2 & 3)                       |                       | R          |                  |     |                    |   | O         | O         |            |           |                  |   |  |
| Electrical & Computer Engineering (see Notes 2 & 6)      |                       | R          |                  |     | R                  | O |           |           |            |           | R                | R |  |
| Mechanical Engineering (see Notes 2 & 6)                 |                       | R          |                  |     | R                  | O |           |           |            |           | R                | R |  |
| FINE ARTS (see Notes 2 & 5)                              |                       |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Creative Writing (see Notes 2 & 9)                       | G                     |            |                  |     |                    |   |           |           |            | O         |                  |   |  |
| History in Art (see Note 2)                              | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Music (see Note 2 & 7)                                   | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Theatre (see Note 2 & 8)                                 | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Visual Arts (see Note 2 & 8)                             | G                     |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| HUMAN & SOCIAL DEVELOPMENT                               |                       |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Child & Youth Care (see Note 10)                         |                       |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Health Information Science (see Notes 2 & 13)            |                       | R          | O                | O   |                    |   | O         | O         |            |           |                  |   |  |
| Nursing (see Note 11) 2 year program                     |                       |            |                  |     |                    |   |           |           |            |           |                  |   |  |
| Social Work (see Note 12)                                |                       |            |                  |     |                    |   |           |           |            |           |                  |   |  |

† In addition to the general admission requirements.

\* Science = Biology, Chemistry, Computer Science 11 (except B.Ed. Elem.), Earth Science, Geology, Physics.

**Note 1:** Exceptions may be made by the Department. Although special courses or sections of first year Chemistry and Physics 102 are available if prerequisites are lacking, students planning to specialize in Astronomy, Biochemistry, Biology, Chemistry, Earth and Ocean Sciences, Microbiology or Physics are strongly urged to complete Math 12, both Chemistry 11 and 12 and at least Physics 11 and preferably Physics 12.

**Note 2:** Cooperative Education Programs in Biochemistry & Microbiology, Biology, Chemistry, Commerce, Computer Science, Creative Writing, Electrical & Computer Engineering and Mechanical Engineering, Geography, Health Information Science, Kinesiology (B.Sc.), Leisure Studies, Math (incl. Statistics) and Physics (incl. Astronomy) and the Arts Cooperative Programs in: Classics, English, French Language & Literature, Germanic Studies, Hispanic & Italian Studies, History, Linguistics, Pacific & Asian Studies, Philosophy, Slavonic Studies, and History in Art are available and information may be obtained by contacting the Department concerned.

**Notes 3:** Applicants with credit for Computer Science 11 and 12 should consult the Department of Computer Science before registering in Computer Science 110.

**Note 4:** Students planning a program in the Faculty of Education take their first year in the Faculty of

Arts and Science. They are referred to the Education Advising Centre when considering their selection of courses. In the second year students transfer to the Faculty of Education.

**Note 5:** UVic now offers an Arts Coop Program in many areas. Contact the Arts Coop Coordinator for details: 721-8841.

**Note 6:** Must normally obtain grade of B or better in Math 12, and Physics 12.

**Note 7:** Music requires an audition and interview for admission to its programs of study. Contact: Administrative Officer, School of Music.

**Note 8:** Questionnaire required.

**Note 9:** Advanced Standing (Second Year and above)—portfolio required. Contact Chairman of department.

**Note 10:** Requires 12 units of College or University study or equivalent, including appropriate courses as outlined in the calendar.

**Note 11:** Curriculum change in 94–95, refer to appropriate section of Calendar for details.

**Note 12:** Requires two years of College or University Study, including appropriate courses as outlined in the calendar.

**Note 13:** Requires one year of College or University study, including appropriate courses as outlined in the calendar.



## 6.0 Senior Matriculates from Outside Canada

Applicants should contact Admission Services for a brochure entitled *Guidelines for International Student Admission* which contains the admission requirements for all countries from which the University currently receives applications. The international application fee is \$60 (Canadian).

## 7.0 Special Category

The University of Victoria is interested in extending university level learning opportunities to residents of British Columbia who may not qualify under the normal categories of admission.

The number of such persons admitted is subject to limitation in accordance with the availability of University resources. Admission under the Special Category is not automatic.

Consideration for admission under the Special Category will be limited to individuals who meet one or more of the following criteria:

- (a) Persons who are at least 23 years of age (prior to the beginning of the session applied for),
- (b) Persons whose academic achievements have been significantly and adversely affected by a disability, health, or family or similar responsibilities. Please refer to the statement 'Students with Disability' on page 8 of this Calendar.

Those who qualify for consideration in the Special category will be selected by the Senate Committee on Admission, Reregistration and Transfer for admission on the basis of:

- (a) their educational history
- (b) non-educational achievements that indicate an ability to succeed at university

Applicants in this category must submit two Special Access Reference forms from persons specifically able to assess the applicant's potential for academic success. References from relatives are not acceptable. Applicants must be able to document the nature and extent of their circumstances, and demonstrate the impact on their educational experience.

## 8.0 First Nations, Métis and Inuit Applicants

The University welcomes enquiries and applications from those of First Nations, Métis and Inuit ancestry.

Applications from First Nations, Métis and Inuit people who do not qualify under the other categories of admission will be considered on an individual basis by the Senate Committee on Admission, Re-registration and Transfer.

The committee will consider each applicant's:

- (a) educational history
- (b) non-educational achievements that indicate an ability to succeed at university.

Applicants must submit two letters of reference from persons specifically able to assess the applicant's potential for academic success. If possible, one reference should be from a recognized First Nations organization. References from relatives are not acceptable. Applicants must also submit a personal letter outlining their academic objectives.

## 9.0 Provincial Adult Basic Education Diploma

The Provincial Adult Basic Education Diploma is recognized for entry to the first year of an undergraduate program. A minimum C+ average is required based on Algebra, English, a laboratory science, and a second language (all at the advanced level), and English plus three academic subjects chosen from Biology, Chemistry, Physics, Earth Science, Geography, Literature, History, Mathematics (academic), Computer Science, Calculus, and Languages (all at the provincial level).

In addition, holders of the P.A.B.E.D. must be 19 years of age or over prior to the beginning of the session applied for.

University level courses used to obtain the Diploma will not be recognized for transfer credit at the University of Victoria.

## 10.0 General Education Diploma (GED)

Applicants with a General Education Diploma (GED) are considered for admission on an individual basis. Applicants generally require a minimum overall average of 58.5% on the GED to be eligible for consideration for admission.

## 11.0 Special Admission of Distinguished Students Currently Registered in Senior Secondary Schools in British Columbia

Distinguished senior secondary school students may apply for conditional admission to the University prior to graduation from their secondary school provided that the following criteria are met:

- (a) The student must be recommended by the school Principal.
- (b) The student must be maintaining a 73% average in all subjects and an 86% average in the discipline to be undertaken at the University. If the student elects a discipline not taught in the school attended, the Principal of the school must make a special recommendation, in writing, stating the student's particular aptitudes.
- (c) The University department concerned must support the student's application.
- (d) The student must be completing a total of at least 12 courses in Grade 11 and 12 leading to graduation and should normally be taking as many courses as are required for access to scholarships offered by the Government of the Province.

The University will accept applicants who have met the above criteria and will register them as "special students" in no more than 6 units of work in any given academic session.

Credit towards a degree will be granted by the University for courses successfully completed when the student is authorized to register in a degree program.

## 12.0 First Admission to Audit Courses

Refer to page 15 for instructions on how to audit courses.

## ADMISSION WITH ADVANCED STANDING

The general requirements listed below apply to the Faculty of Arts and Science. For admission requirements to other Faculties refer to the appropriate section of this Calendar.

Note that applicants who have failed their last year, or who have an overall weak academic record may not be permitted to transfer to the University of Victoria, even if eligible for admission under the previous section (Entry to Year One).

### 1.0 Colleges and Universities

Applicants require successful completion of a minimum of 12 units of transferable courses with an overall average equivalent to C (60%) at the University of Victoria, calculated on the most recent session; and, if the number of units taken in that session is less than 12, on a cumulative total of the most recent 12 units. Only University level courses will be used in the calculation; repeated and failed courses will be included. Applicants with less than 12 transferable units must have a minimum gpa of C (60%) on any post-secondary record, and be able to meet the requirements for admission under the previous section (Entry to Year One).

Applicants completing a technical or career program at a college must meet the requirements set out in 2.0 below.

### 2.0 Institutes of Technology

Applicants require completion of a two year Diploma with a minimum 70% average. Transfer credit will normally be limited to 15 units at the first or second year level but, at the discretion of the department concerned, more may be granted. Upper level credit may be granted upon detailed comparison made by the department concerned of syllabi, text and examinations.

### 3.0 Colleges of Applied Arts & Technology (CAAT)

Applicants with a three year diploma with a minimum overall average of 70% are eligible for admission with up to 15 units of transfer credit at the first or second year level being granted.

### 4.0 C.E.G.E.P. — Quebec

Applicants with the diplôme d'études collégiales (D.E.C.) with a minimum overall average of 70%, at a collège d'enseignement générale et professionnel (C.E.G.E.P.) may normally be granted up to 15 units of transfer credit at first or second year level.

### 5.0 International Baccalaureate

Each subject completed with a grade of 4 or higher\* at the Higher Level may receive 3 units of credit, to a maximum of 9 units.

Applicants who have successfully completed the International Baccalaureate Diploma requirements, including three subjects at the Higher Level and two subjects at the Subsidiary Level, are eligible to receive 15 units of transfer credit at first or second year level.

\*Some subjects require a higher grade; refer to the current B.C. Transfer Guide for further information.



**6.0 Great Britain — British General Certificate of Education (G.C.E.):**

Applicants require completion of at least 5 subjects of which at least two must be at the Advanced (A) Level. The remainder may be any combination of AS or O level subjects. One of the five courses *must* be English. A minimum overall average of C is required on the best two academic A level subjects. A grade of E is not acceptable. Each A level subject completed with a grade of C or higher may be eligible to receive 3 units of transfer credit at the first or second year level to a maximum of 12 units.

**Cambridge School Certificate:**

As for the G.C.E. above, with completion of Principal Level courses.

**7.0 Hong Kong — University of Hong Kong Matriculation Certificate**

Applicants require equivalent of G.C.E. Grades of D and E are not acceptable.

**8.0 Admission to a Second Undergraduate Degree**

See page 23 for the requirements for admission to a second bachelor's degree at the University of Victoria. Applicants must meet the prevailing grade point average required for the Faculty to which they have applied.

**9.0 Admission to Non degree Study**

Applicants qualifying for admission to the University are eligible for entry to non degree study (credit courses).

Applicants planning to complete their degree (or college credential) elsewhere, who wish to take courses at the University of Victoria for credit at their home university, must have a *Letter of Permission* sent directly by the issuing institution to Admission Services. The letter must include the session for which permission is given and the specific courses to be taken. Other documents, such as transcripts and T.O.E.F.L. Score Reports, may be required as determined by Admission Services (see 7.0, p. 13). Except for those students studying under a partnership agreement, students visiting from a College or other institution offering only first and second year courses shall not be permitted to register in third and fourth year courses at the University of Victoria. Visiting students may register in a maximum of 15.0 units. Visiting or non degree students who wish to become regular students must meet all the prevailing admission requirements.

**ADVANCED STANDING AND TRANSFER CREDIT****1.0 College Board Advanced Placement Program**

An applicant who has passed the Advanced Placement examination administered by the College Entrance Examination Board in 1989 or later in selected subjects, with a grade of 4 or 5 will receive transfer credit. Contact Admission Services for information regarding AP transfer credit.

An applicant who has passed an Advanced Placement examination administered by the College Entrance Examination Board with a grade of 3 in the subjects shown below will be granted advanced placement only (no transfer credit). Applicants should consult with the department concerned for course advice.

|  |  |
|--|--|
| Art (History)  | German   |
| Art (Studio) (no transfer credit given - advanced standing only) | Latin  |
| Biology  | Mathematics  |
| Computer Science   | Music  |
| Economics  | Physics  |
| English  | Psychology (no transfer credit given - advanced standing only) |
| French   | Spanish  |

**2.0 B.C. Grade 13 Courses**

Credit is granted, on an individual course basis, for courses satisfactorily completed on the curriculum of the former B.C. Grade 13 program, provided that the applicant is eligible for admission under *Entry to Year One* or *Admission with Advanced Standing*.

**3.0 Limitations on Transfer Credit**

Those persons planning to undertake preliminary studies at another institution should verify in advance that the courses which they propose to take elsewhere may be acceptable for transfer credit in their subsequent program at the University of Victoria.

Transfer credit granted in a degree program is limited and may not normally be applied to the final 30 units of the program. Exceptions to this regulation require the approval of the Dean of the faculty concerned.

If a student's performance warrants a review of transfer credit granted on admission, the University reserves the right to require such a student to make up any deficiencies (without additional credit) before proceeding to studies at a higher level. These decisions would normally be taken at the department level.

**APPLICANTS WHOSE FIRST LANGUAGE IS NOT ENGLISH**

The University requires that applicants for admission whose first language is not English, and who have not studied in Canada or an English speaking country for 4 recent academic years in an acceptable program from an approved secondary or post-secondary institution must take the test of English as a Foreign Language (TOEFL) and submit scores by May 31. A score of not less than 575 on the Test of English as a Foreign Language is required for undergraduate admission to the University.

Applicants must designate the University of Victoria as a receiving institution for the test results. Applicant copies are not acceptable.

Information concerning the Test of English as a Foreign Language, and the times and places at which it is administered, may be obtained by writing to Counselling Services, University Centre, or to the Education Testing Service, Princeton, N.J. 08540, U.S.A. Applications are available from the University's Counselling Services.

**UNIVERSITY ENGLISH REQUIREMENT**

All applicants who are admitted to the University must take the University of Victoria English Placement Essay, unless they have satisfied one of the conditions listed on page 15 under English Requirement for Undergraduates.

**APPLICATION FOR ADMISSION TO UNDERGRADUATE FACULTIES (EXCEPT LAW)**

Persons seeking admission to credit courses for the first time must obtain an Application for Admission from Admission Services. This form must be returned, fully completed, to Admission Services by the date specified for the Faculty or program applied for (see inside front cover of this calendar). Normally, no applications for admission will be accepted after May 15 for September entry.

Applicants applying for financial aid must be able to give their Social Insurance Number (the federal government requires that applicants for Canada Student Loans have a Social Insurance Number). Application for a number may be made through the Canada Employment and Immigration Commission.

An application fee of \$20 is required from all applicants to the University of Victoria. This fee, which is non refundable and not applicable to tuition fees, must accompany the form. Applications submitted without this fee will be returned.

An evaluation fee of \$35 must accompany the form for every applicant whose records originate, in whole or in part, outside the Province of British Columbia. This fee is not required of visiting students applying on the basis of a letter of permission. It is not refundable, nor can it be applied to tuition.

An application/evaluation fee of \$60 is required from all applicants who have records from a source outside Canada. This fee is non refundable, not applicable to tuition fees and must accompany the form. Applications submitted without this fee will be returned.

**Please Note —**

Persons applying for admission to Summer Studies who plan to attend the subsequent Winter Session must submit an Application for Reregistration to Records Services (see page 14) by the deadlines shown on the inside front cover of the calendar.



## REQUIRED DOCUMENTATION FOR FIRST ADMISSION

### Official Transcripts

An official transcript is one which is issued directly to Admission Services from the institution previously attended. The student's copy, a photocopy or an unsealed transcript is considered unofficial and will not be used when making an admission decision. No final decisions regarding admission will be made until two final official transcripts have been forwarded from the institution to Admission Services.

Applicants submitting falsified documentation or failing to declare attendance elsewhere shall have their applications cancelled — no further applications will be considered; if they are registered in courses, appropriate disciplinary action shall be recommended to the President by the Senate Committee on Admission, Reregistration and Transfer.

Transcripts in languages other than English or French must be submitted together with notarized translations into English or French.

### 1.0 1995 B.C. Secondary School Graduates

Applicants graduating from B.C. Secondary Schools in 1995 should apply by February 28 for early admission, and designate the University of Victoria as a receiving institution for interim grades from the Data Systems Administration Branch of the Ministry of Education. The Branch will send interim grades to the University in April, and final grades in August. If an applicant has transfer standing in any grade 11 or 12 course, two official transcripts must be sent directly to Admission Services from the institution at which the courses were taken.

### 2.0 1995 Secondary School Graduates within Canada

Applicants graduating from other Canadian provinces in 1995 should apply by February 28 for early admission. Their secondary school must complete an *Out-of-Province Early Admission* form, and send it directly to Admission Services. Two final official transcripts showing all courses taken and confirming graduation must be sent directly from the secondary school to Admission Services as soon as results are available.

### 3.0 All Other Secondary School Graduates

Applicants applying to the University on the basis of secondary school graduation must have two official copies of their transcripts showing all courses taken and confirming graduation sent directly from the secondary school or issuing institution to Admission Services as soon as results are available.

### 4.0 Special Category

Candidates applying for admission under the Special Category Regulation should submit: two official transcripts of all academic work taken sent directly to Admission Services from the issuing institution; a resume outlining work experience since leaving school; a letter from the applicant including relevant personal background and reasons for wanting to attend university; and finally, two references on forms supplied by the University from employers or persons who know the applicant well. References from relatives are not acceptable. Applicants must be able to document the nature and extent of their circumstances and demonstrate the impact on their educational experience.

Applicants under this category must also possess the prerequisites for the program they wish to enter.

### 5.0 Applicants with Advanced Standing

Any applicant who has completed any post secondary study must have two official transcripts of both secondary education and post-secondary education sent directly from the issuing institution(s) to Admission Services.

### 6.0 Applicants Holding Recognized Degrees

An applicant holding a recognized degree must have two official transcripts of all post secondary work including proof of conferral of the degree sent by the issuing institution(s) directly to Admission Services.

### 7.0 Visiting Students

Students studying toward a degree at another institution who wish to take credit courses at this University for transfer back to their home institution must submit a *Letter of Permission* from their home institution, indicating the session to which the permission applies, and, if possible, the courses to be taken. Such study is limited to a normal maximum of fifteen units.

Visiting students will not be authorized to re-register for a future session until an up-to-date letter of permission is submitted.

Visiting students whose first language is not English and who have not studied in Canada or an English speaking country for 4 recent academic years in an acceptable program from an approved secondary or post secondary institution, must take the test of English as a Foreign Language (TOEFL). A score of not less than 575 is required for undergraduate study.

### 8.0 Additional Faculty or Program Requirements

Applicants to Faculties other than Arts and Science should consult the program requirements for entry in the chart on page 10. In certain cases, applicants must submit additional documentation or meet additional requirements as specified in the Faculty and Departmental regulations.

Teachers whose professional training was not completed within ten years prior to their application or reapplication to the Faculty of Education must submit the following for the Committee's consideration:

- resume of all teaching experience including dates, locations and grade levels, and indicating whether full time, part time, or substitution; and
- copies of the most recent Superintendent's and/or Principal's Reports; and
- letter(s) from Principal(s) attesting to teaching effectiveness in substitution roles if applicable; and
- copy of Teacher's Card as issued by the Ministry of Education or the B.C. College of Teachers.

## NOTIFICATION OF ADJUDICATION

All applicants will be informed *in writing* of their acceptance or rejection. Applications are evaluated by the Admissions Officer when all documentation required for a decision have been received in Admission Services. Due to the large volume received, this can take up to six weeks; applicants to quota programs may wait longer for notification.

Applicants are strongly advised not to make financial or other commitments to travel and accommodation prior to receipt of written confirmation of acceptance *from Admission Services*.

## APPEAL PROCEDURE

An applicant whose application for admission is rejected and who is able to prove extenuating circumstances or provide information that was not presented initially may request in writing (there are no personal appearances in front of the Committee) to the Senate Committee on Admission, Reregistration and Transfer, c/o Director of Admission Services, that the application be reconsidered. Such a request should include any additional information together with any supporting documents from persons familiar with the applicant's abilities and circumstances.

Normally, grounds for appeal are limited to:

- Significant physical affliction or psychological distress documented by a physician or other health care professional.
- Evidence of serious mis-advice or errors of administration by authorized University personnel, with evidence that the appellant's studies were adversely affected.
- Documented significant distress, or documented significant responsibility as a caregiver, as a result of an immediate member of the family suffering from a serious trauma or illness.

Dissatisfaction with University regulations, or disagreements concerning the evaluation of admissibility (e.g. calculation of g.p.a., questions regarding English proficiency) or failure to meet published deadlines will not constitute Grounds for Appeal.

The Senate Committee on Admission, Reregistration and Transfer, will consider all the documentation presented and will make a final decision on the application, subject to review by the Senate Committee on Appeals on the grounds of specific procedural error (see Avenues of Appeal and Redress, page 16).

## ENROLLMENT LIMITATIONS

The University reserves the right to limit enrollment. In addition, although applicants may be admissible to the University, it may not be possible to grant them entry to the specific program they wish to follow.



## REREGISTRATION

All inquiries relating to reregistration in undergraduate faculties should be addressed to the Director of Records Services.

### APPLICATION FOR REREGISTRATION

1. Students who have registered at another university or college since last in attendance at the University are required to state the names of all educational institutions of postsecondary level attended and to submit official transcripts of their academic records at the institutions attended, by the due dates shown on the inside front cover of this Calendar. Failure to disclose attendance at another institution will normally lead to disciplinary action by the University, and may include suspension. An evaluation fee of \$35 must accompany the application for reregistration (if not previously submitted) for every applicant whose records originate in whole or in part outside the Province of British Columbia. This fee is not required from "visiting students" or from students who obtained a Letter of Permission from the University of Victoria to study elsewhere. The fee is not refundable, nor can it be applied to tuition.
2. Students who were registered in the most recent session at the University may be authorized automatically for reregistration without the submission of an application; some students will be required to complete an application. Students who were not registered in the

most recent session must submit an application for reregistration. Consult Records Services for details.

3. A student who has been required to withdraw from the University in the past because of unsatisfactory progress or standing (see Standing, page 22) and who wishes to be considered for reregistration must follow the procedures listed in (1) and (2) above. A student who was required to withdraw following the most recent session who wishes to appeal the withdrawal or a student who has been required to withdraw a second or subsequent time from the University in the past and who wishes to be considered for reregistration, must include with the application a letter, addressed to the Senate Committee on Admission, Reregistration and Transfer, c/o Records Services, which states why the student believes the application should be accepted. Grounds for appeal to the Committee are limited (see Appeal Procedure above). A final decision regarding the student's application, subject to review by the Senate Committee on Appeals on the grounds of specific procedural error (see Avenues of Appeal and Redress, page 16) will be made on the documentation presented.
4. If the results of deferred examinations affect the standing of a student, an Authorization to Reregister may not be issued until examination results are available depending upon the student's academic status.

## REGISTRATION

### Completion of Registration:

*Students should recognize that admission and registration are two separate procedures. Admission to the University does not guarantee entry to a particular course or program. Because enrollment in all courses is limited, admitted students may not be able to register in their chosen courses or sections. Moreover, entry to a specific course may also be limited by academic requirements.*

Inquiries relating to registration in undergraduate faculties other than Law should be addressed to the Director of Records Services. Inquiries relating to registration in the Faculty of Graduate Studies should be addressed to the Director of Admissions and Records, Graduate Studies. See Faculty of Law for regulations concerning registration in that Faculty.

In addition to completing the procedures mentioned above under the headings Application for Admission and Application for Reregistration all students in the Winter Session are required to register as announced by the University (see Sessional Calendar, pages 4 and 5). Each new student, by Letter of Admission, and each returning student, by Authorization to Reregister will be informed about Procedures for Telephone Registration.

All Letters of Admission or Authorizations to Reregister that are not used to register in the term and session to which they apply are automatically cancelled. Students who are issued a Letter of Admission or Authorization to Reregister for September may not use this document for entry in January (see Registration for One Term Only).

Once registration in a course has been processed, the registration may be cancelled if all fees have not been paid by the due date (see page 23).

Further, Departments reserve the right to cancel the registration of any student who is not able to demonstrate that all course prerequisites have been met or who fails to attend a course within the period indicated below:

|                         |   |
|-------------------------|---|
| Winter Session courses: | first seven calendar days from commencement of the course |
| May-August courses:     | first seven calendar days from commencement of the course |
| May-June courses:       | first two class meetings                                  |
| July-August courses:    | first two class meetings                                  |

(Note: Students should not assume, however, that failure to attend classes will result in automatic cancellation of their registration — see Student Responsibility, below.)

A student who for medical or compassionate reasons is unable to attend a course during the appropriate period mentioned above may

apply to the department within that time to confirm registration in that course and the department may confirm the registration. (See Attendance at Lectures, page 17, and Voluntary Withdrawal, page 22.)

### Student Responsibility:

Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, students are responsible for the completeness and accuracy of their registration. They must ensure that there is no discrepancy between the program they are following and that recorded in Records Services and that all changes, including those in address and telephone number are reported promptly to Records Services. Students may not take courses for which they have not registered. Students are solely responsible for checking the calendar description for each course registration and assigned transfer credit for any references to duplicate, mutually-exclusive or cross-listed relationships (eg. "formerly", "Not open to..."); credit will NOT be assigned more than once in these courses. Such courses will still count in the student's sessional average, however, when determining the student's standing (see page 22).

Students who have credit for courses taken more than seven years ago at the University must consult the departments to ensure that courses they may wish to take have not been taken previously under a different number.

A letter mailed to a student's address as currently on record in Records Services will be deemed adequate notification to the student for all matters concerning the University.

### Students with Unsatisfactory Standing:

No student with unsatisfactory standing will be permitted to register without permission of the faculty concerned.

### Registration for Both Terms in Winter Session:

Students planning to undertake studies in both terms of the Winter Session must register for all courses they intend to take, including single term courses beginning in January.

### Registration for One Term Only:

If suitable single term courses are available, students may register for a program of courses to be taken in the First or Second Term (see inside cover for due dates of applications).

### Changes in Registration:

**NOTE: Fee reduction deadlines differ from academic change dates. See pages 4 and 5.**



1. Students may add courses during the first thirteen days of classes and drop courses during the first ten days of classes of each term without penalty upon formal notification of Records Services. (See instructions in Telephone Registration literature.)
2. Students may drop First Term courses until the last day of classes in October and Full Year and Second Term courses until the last day of classes in February. (See instructions in Telephone Registration literature.) Failure to notify Records Services by the specified date will result in the student receiving a failing grade for the course. (See fee reductions for dropping courses, page 26.)
3. A student who has a grade of E or F in a First Term course may reregister in the course if it is offered in the Second Term, provided that the student will be registered in not more than 9 units in the Second Term. A student who has an E in the First Term course may take a Second Term course which lists the First Term course as a prerequisite only with the permission of the department concerned.
4. Any undergraduate student, who after registration decides to drop all courses and does not intend to register in any other credit course in the session, is withdrawing from the University and must notify Records Services in writing. (See Withdrawal, page 22.)

#### Concurrent Registration at Another Institution:

Normally a student may not be registered concurrently in courses offered at the University of Victoria and in university level courses offered at another institution. In exceptional circumstances, such registration may be permitted but only with the prior consent of the Dean of the faculty concerned or the Administrative Registrar.

#### Registration in Graduate Courses by Undergraduates:

Students in their final year of a Bachelor's degree program who have a grade point average of at least 6.00 in the previous year's work may be permitted to register in up to 3 units of graduate courses on the recommendation of the department concerned and with the consent of the Dean of Graduate Studies. Apart from students admitted to the Faculty of Graduate Studies, no students other than those mentioned above may register in graduate courses.

#### Application for Graduation:

See Graduation, page 23.

#### English Requirement for Undergraduates:

All students enrolling in the University for the first time, including diploma, certificate and unclassified students, must complete at least 1.5 units of University of Victoria first-year English.

1. Students will be exempted from this requirement (provided they are not required by their Faculty and/or program to have credit for English) for any of the following reasons:
  - (a) A score of 80% or above on the B.C. Provincial Grade 12 English Examination within the last three years prior to admission;
  - (b) A mark on the E.P.E. (the English Placement Essay administered by the Department of English) that shows the student already has the skills taught in English 115;
  - (c) A score of 3 or higher (out of 5) on the Advanced Placement Examination in English Language and Composition or English Literature and Composition;
  - (d) Three units or more of transfer credit for university level English courses;
  - (e) Specific equivalency for English 115 or 215.
2. Students who have not taken the B.C. Provincial Grade 12 English Examination within the last three years, or who have scored lower than 70% on it, must write the E.P.E. to determine whether they must register in English 099 or Linguistics 099 before completing their required 1.5 units of English.
3. All students who are not exempted from the requirement must register in 1.5 units of English before completing 30 units of credit. A student who fails to complete the requirement before completing 30 units of credit must register in an English course in each subsequent session attended until the student has completed the requirement; such a student who fails to register in an English course will be denied authorization to re-register in any subsequent session until the student has completed the requirement. Part-time students are encouraged to complete the English requirement as soon as possible.
4. Students who are completing a degree on a part-time basis, may satisfy the English requirement through the Open Learning Agency or a B.C. community college. If they must write the E.P.E., they may

do so locally at the time and place arranged in consultation with the Director of the Writing Program (a fee will be charged for this test).

Students who have satisfied the University English Requirement need take only those English courses which may be required in their degree program. Students who fail to achieve a satisfactory score on the University of Victoria English Placement Essay are directed as follows:

- Those whose first language is English must register in English 099 for the first term and in English 115 for the second term. Students in English 099 may not take any other English course until they have completed 099. Those who fail English 099 in the first term must repeat the course in the second term. If such students fail the course again, they must repeat it in the next winter session term that they attend; should they not do so, or do so and fail, they will normally be denied permission to return to the University in any future session until they have demonstrated the required level of competence in English. Such denials are subject to appeal to the Senate Committee on Admission, Reregistration and Transfer. To qualify for reregistration, students must register in English 115 in the term following successful completion of 099 and in each subsequent term attended until passed. (Any deviation from this sequence must have approval from the Director of the Writing Program.) Upon successful completion of English 115 these students will have satisfied the University English Requirement.
- Students whose first language is not English must follow the same procedure as for those whose first language is English, except that such students may be required to take Linguistics 099 instead of English 099. Such students will usually be enrolled in Linguistics 099 for two successive terms before they are able to enroll in English 115. Successful completion of Linguistics 099 is determined by the student's score on the English Placement Essay administered by the English Department.

Students who fail Linguistics 099 will be required to repeat the course the next term and each subsequent term until they achieve a passing score on the English Placement Essay. When they pass the course, they will proceed to English 115. If, after the fourth consecutive term of enrollment, they do not pass Linguistics 099, they will be required to withdraw from the University for insufficient command of the language of instruction.

For students who are placed initially in either English 099 or Linguistics 099, successful completion of English 115 is necessary to satisfy the University English Requirement. There must be no interruption in the sequence of courses without the permission of the Director of the Writing Program. The repetition of Linguistics 099, English 099, or English 115 must also occur in the next term attended.

#### Exception:

##### I. Letter of Permission

Those students who are admitted on a Letter of Permission are not obliged to satisfy the University English Requirement.

Students can obtain information about registering for and writing the University of Victoria English Placement Essay from Admissions Services or the Department of English.

## AUDITING A COURSE

An individual who is either a registered student or a member of the community may be permitted to audit up to 3 units of undergraduate courses in a session. Registration as an Auditor is subject to the following conditions:

- (a) The individual must receive permission from the department concerned.
- (b) Admittance to the class is dependent upon the class size and other factors that the instructor and the department establish.
- (c) The degree of participation in the course is at the discretion of the department.
- (d) Attendance shall grant no entitlement to an academic record of such attendance and shall not be considered as meeting admission, prerequisite or course requirements for any University credit program.
- (e) Graduate courses are not open to persons who are not registered in the Faculty of Graduate Studies, except as provided by the regulations of that Faculty.



## INDIVIDUALLY SUPERVISED STUDIES

Individually supervised studies may be undertaken during the Winter Session; such studies will normally consist of Directed Studies courses. Students interested in pursuing such studies should contact the Advising Centre in the Faculty of Education or the appropriate department chair in the other faculties. The availability of such courses will be determined by the department concerned.

For individually supervised studies in the Summer see the Summer Studies Supplement to this Calendar.

## MEDICAL REQUIREMENT

A medical examination is not compulsory except for students taking Physical Education courses. The medical examination is not provided by the University; it must be obtained at the student's own expense.

The University, through the Health Services, may require a student to take a medical examination at any time during attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole.

### Students not Residents of Canada:

Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete.

Such students are not eligible to receive hospital or medical insurance from the Province of British Columbia until they have established residency in the Province for 12 consecutive months. In the interim they must purchase hospital and medical insurance as a condition of registration.

Further information is found under Health Services, page 29.

## AVENUES OF APPEAL AND REDRESS

Students who have grounds for believing themselves unjustly treated within the University are encouraged to seek all appropriate avenues of redress or appeal open to them.

### Nonacademic Matters:

Matters that are not strictly academic may be brought to the attention of appropriate University officials or bodies through the Counselling Services, the Student/Faculty Liaison Committee or similar faculty committee, the Dean or the President. In addition, the student may wish to consult the UVSS Ombudsperson (see page 32).

### Academic Matters:

Academic matters fall within the purview of course instructors, the departments, the faculties and the Senate.

Depending on the nature of the academic matter of concern to the student, the order in which the student should normally seek redress is first, the course instructor; second, the departmental chair; third, the Dean of the faculty; and finally, the Senate. In addition, the student may wish to consult the UVSS Ombudsperson (see page 32). A student seeking a formal review of an assigned grade should consult the regulations on page 21.

### Appeals to the Senate:

Once all the appropriate recourses have been exhausted, students may have the right of final appeal to the Senate. Except on those matters in which the sole question raised turns on the exercise of academic judgement, students may appeal to the Senate on all matters which are within the jurisdiction of the Senate as set out in the *University Act*. The Senate has delegated to its Standing Committee on Appeals the authority and responsibility to decide on behalf of the Senate all appeals from students on those matters which they may appeal to Senate. Students should lodge their appeal in writing with the Secretary of Senate and should include with the appeal a clear and precise statement of:

- the decision or act or treatment which is being appealed (including the name of the person or body whose decision, etc., is being appealed);
- the reasons why the appellant believes the appeal should be allowed;
- the remedy or relief which the appellant is seeking.

Unless provided for otherwise in a specific Calendar regulation an appeal to the Senate must be filed within six months of the decision being appealed.

The decisions of the Senate Committee on Appeals are final and may not be appealed to the Senate.

### Terms of Reference for Senate Committee on Appeals:

#### 1. Preamble:

- Students may appeal to the Senate on any matter within the jurisdiction of the Senate as set out in the *University Act*, except those matters in which the sole question raised turns on the exercise of academic judgment. The Senate has delegated to its standing Committee on Appeals the authority and responsibility to decide on behalf of the Senate all appeals from students. The decision of the Senate Committee on Appeals is final.

- Subject to paragraph (a) above, where a student has sought all other appropriate recourse and the student appeals to the Senate on a matter which is within the jurisdiction of the Senate, the Secretary shall forthwith refer the appeal to the Senate Committee on Appeals.

#### 2. Time Limit:

Unless otherwise provided in a Calendar regulation, an appeal must be filed with the Secretary within six months of the decision or communication of the decision.

#### 3. Membership:

- The Senate Committee on Appeals shall consist of members of Senate appointed by the Senate on the recommendation of the Senate Committee on Committees as follows:

- One faculty member of each Faculty other than the Faculty of Graduate Studies.
- Two students appointed from two different faculties.
- One of the Senators elected by Convocation or appointed by the Lieutenant-Governor in Council.

- The Chair shall be designated by the Senate Committee on Committees.

- The Secretary of Senate (or designate) shall serve as non-voting Secretary of the Committee.

#### 4. Conflict of Interest:

Any member of the Committee who has a conflict of interest in any appeal shall withdraw from the Committee for that appeal and shall be replaced as provided in Section 5.

#### 5. Temporary Replacement:

- Where a member is unable to serve or withdraws for a particular appeal that member may be replaced during the entire consideration of that appeal by a member of the Senate selected by the Senate Committee on Committees.
- In making its selection the Senate Committee on Committees shall make a reasonable effort to replace a faculty member by a faculty member, a student by a student, and a Senator elected by Convocation or appointed by the Lieutenant-Governor in Council by such a Senator.

#### 6. Vacancy:

Any vacancy shall be filled without delay by the Senate Committee on Committees. Any appointment so made shall be subject to the approval of the Senate at its next ordinary meeting.

#### 7. Quorum:

- The Secretary shall schedule appeal hearings so that as many members as possible can attend.
- At any hearing scheduled by the Secretary five members of the Committee shall constitute a quorum of the Committee and that quorum shall act in the matter until its completion PROVIDED THAT if for any reason any member of the quorum is unavailable



at the time scheduled for the continuation of a hearing the quorum may be reduced to not less than three members if the parties to the appeal consent. No member of the Committee who has been absent from any part of a hearing shall take any further part in that hearing.

- (c) Quorum must include at least one student member.

#### 8. Procedures:

- (a) The Committee shall hold a hearing of each appeal within its jurisdiction. Normally, the hearing will be scheduled within two months of the receipt of the appeal.
- (b) The appellant shall make a clear and precise written statement of:
  - (1) The decision or act or treatment which is being appealed, including the name of the person or body whose decision is being appealed.
  - (2) The reasons why the appellant believes the appeal should be allowed.
  - (3) The remedy or relief sought.
- (c) The following rules shall govern the procedures for the hearing of an appeal:
  - (1) The Chair shall preside at the hearing.
  - (2) The Committee shall determine its procedures.
  - (3) Both the appellant and the person or persons whose decision is being appealed shall be invited to appear. Each party may be represented or advised by counsel. If the appellant should fail to appear without giving just and sufficient cause, the Committee may decide to dismiss the appeal.
  - (4) Each party shall have access to information submitted to the Committee.
  - (5) The Committee may seek clarification from both parties or further information or invite other persons to attend.
  - (6) Each party shall be given reasonable notice of all hearings and may attend to hear what the other says and shall have the opportunity for further comment and clarification.
  - (7) The Committee shall base its decision on the material it receives and the information given at the hearing.
  - (8) The hearing shall be in camera.
  - (9) All deliberations of the Committee are confidential. Members of the Committee shall not discuss the substance of an appeal with any of the parties other than at a hearing.
  - (10) A pro forma motion shall be stated by the Chair as follows: "that the appeal be allowed", and the motion shall be adopted only if a majority of members present vote for the motion.

- (11) Any member of Senate who serves on the Committee on Appeals as a regular member, a temporary member or as a replacement for a member, has a right to vote.
- (12) Voting shall be by show of hands and each member present, including the Chair, shall vote.
- (13) If, in the opinion of the Committee, an issue on an appeal raises an unsettled question of policy or procedures of general importance to the University, the Committee may refer that question to the Senate for a ruling before it makes its decision or recommend a change or clarification to Senate.

#### 9. Report of Decision:

- (a) The Committee shall give its decision in writing, signed by all members, to the Secretary who shall then give the decision to the parties of the appeal.
- (b) The decision shall include a statement of the views which prevailed and may include a statement of views which did not prevail.

#### 10. Report to Senate:

- (a) The Committee on Appeals shall make an annual report to Senate in May.
- (b) The report shall state the number of appeals, the nature of appeals, and their disposition.
- (c) If the Committee finds any University regulation or procedure that appears to need revision, it shall bring this to the attention of the Senate and may recommend appropriate action.

#### 11. Reopening of an Appeal:

- (a) Normally an appeal shall be reopened only if in the opinion of the Appeals Committee there is new evidence and the Committee is satisfied that
  - (1) the evidence could not have been found by the time of the original hearing by the exercise of reasonable diligence and
  - (2) the new evidence is so material that its production at the original hearing may have affected the outcome.

#### Petitions:

Students whose circumstances are such that an academic regulation appears to cause them undue hardship are encouraged to consult their faculty advising centre or departmental chair to determine whether the regulation is subject to waiver by the Dean of the faculty on petition by a student. The Dean's decision in such matters is final, subject to review by the Senate Committee on Appeals on grounds of specific procedural error (see above).

## ACADEMIC REGULATIONS

*Students should refer to the Calendar entries of the individual faculties for any additional or more specific academic regulations.*

### ATTENDANCE AND COURSE LOAD

#### Attendance at Lectures:

Students are expected to attend all lectures in each course for which they are enrolled. Any department is authorized to require a student to withdraw from a course offered by the department if the student is registered in another course such that the timetables for the two courses overlap. Admission to a lecture or laboratory may be refused by the instructor for lateness, misconduct, inattention or neglect of duty. Students who neglect their academic work, including assignments, may be debarred from the December or the final examinations in a course. *Academic work includes, but is not restricted to, attendance at lectures and laboratories, and completion of assignments. Instructors must inform students at the beginning of term in writing, what minimum attendance either at lectures or in laboratories is required to avoid debarment. (See Term Assignments and Debarment from Examinations, page 20.)*

#### Absence Consequent on Illness:

Students who are absent because of illness, an accident or family affliction should report to their instructors on return to classes.

#### Minimum Course Load:

Credit for courses may be accumulated by full time or part time studies in the Winter Session, or by studies in the Summer Studies. In certain programs, however, students are expected to commit themselves to studies in the Winter Session and to a specific number of units of courses; for example, Honours programs in Arts and Science require 15 to 18 units in each Winter Session. Students are therefore referred to the Calendar entries of the individual faculties for information on programs that require a commitment to a specific number of units of courses in each Winter Session.

Students should note that present regulations governing Canada Student Loans require a minimum enrollment of 9 units, and that to qualify for nearly all undergraduate scholarships, bursaries and prizes administered by the University, the terms of the awards require enrollment in a minimum of 15 units in each Winter Session, except as noted on page 286.

#### Maximum Course Load:

1. No student may register in more than 18 units in the period September-April.
2. No student may register in more than 9 units in either of the periods September-December and January-April.
3. No student may register in more than 9 units in the period May-August. A student registered in this period has the choice of registering



in a maximum of 6 units of May-June courses or a maximum of 6 units of July-August courses.

Exceptions to these regulations require the prior written approval of the Dean.

#### Final Year Studies:

Normally, all students must complete the final 15 units of courses at the University of Victoria. In exceptional circumstances, however, a student may take the final year of study at another university, subject to the regulations mentioned under Graduation, page 23, and to the prior consent of the Dean of the faculty concerned.

A student authorized to attend another institution who accepts a degree from that institution abrogates any right to a University of Victoria degree until the student has satisfied the University's requirements for a second bachelor's degree. (See page 23.)

### CREDIT

#### Accumulation of Credit:

Successful completion of a credit course entitles the student to the recording of such credit on the student's academic record. The application of such credit to a degree or diploma program, however, is subject to the regulations governing the requirements of the program. In the case of a course for which credit has been received and which is repeated, the units will be shown on the student's record in each instance but will count only once toward the degree or diploma unless the course is designated as one that may be repeated for additional credit.

#### Credit Limit — Introductory Statistics Courses:

The maximum number of units of first-term introductory statistics courses that may be taken for degree credit is limited to three, chosen from Economics 245 (or 240); Geography 321; Psychology 300A; Sociology 371; Statistics 254, 255, 260 (or 250).

#### Credit by Course Challenge:

Course challenge is intended to allow a registered undergraduate student to seek credit in a given undergraduate course on the basis of knowledge or experience acquired outside the University. It involves undertaking a special examination or other form of assessment administered by the relevant department.

Course challenge is not offered by all departments. Where it is offered, it is subject to the following restrictions:

- Course challenge examination/evaluation normally must be completed before the end of the period for adding courses in both Winter Session and Summer Studies, at a time determined by the department.
- Credit by course challenge is limited to a maximum of 15 units, or for students on a diploma program to a maximum of 3 units.
- No course whose equivalent appears on a student's secondary school, college or university transcript may be challenged.
- Once credit in a course at one level has been obtained, its prerequisite in the same subject may not be challenged.
- A specific course may be challenged only once.
- Once the examination or assessment has been administered, the result will be entered on the student's academic record. The student may not choose whether or not the result will be recorded.

Initial inquiries should be directed to Records Services, where application forms may be obtained. The course challenge fee must be paid before the challenge examination is undertaken. If the appropriate departmental chair permits a course challenge, the chair shall indicate approval by signing the application form and shall inform the student of the time at which the challenge examination will take place. Once the application has been approved, the course challenge fee is not refundable. (See para. 2(d), under Fees.)

A range of authorized assessment techniques is available for evaluating the student's course challenge. Whatever technique is chosen, it shall be such that the examination procedure and the results are recorded and kept in the department.

The chair, after having approved the results, will report the grade awarded in the course challenge examination to the student and Records Services in writing.

The grade will be entered on the student's academic record and will be used in determining the student's sessional standing.

All students, including newly admitted students, are urged to complete challenge examinations before the end of the period for adding

courses, so that any course changes necessitated by the examination results can still be made.

#### Advanced Placement or Exemption Without Unit Credit:

In exceptional circumstances, undergraduate students may already have prepared themselves by independent study or other experience to omit a required course or courses or to undertake more advanced work than that ordinarily prescribed in the initial stages of a departmental program. Students desiring advanced placement in a particular discipline may apply to the department giving courses in that discipline for such placement.

Advanced placement or exemption from a required course carries no unit credit.

### REPEATING COURSES

This regulation applies to students taking courses in the Faculties of Arts and Science, Education, Fine Arts, and Human and Social Development.

A student who fails a required course must repeat the course or complete a permissible substitute within the next two sessions attended. A student who fails to do so will normally be debarred from future registration in the required course.

No course may be attempted more than twice without the prior approval of the Dean of the student's Faculty and the Chair of the Department in which the course is offered unless the Calendar course entry specifically states the course may be repeated for additional credit. Where such approval is not obtained, the Department may de-register the student from the course at any point. An attempt is defined as a completed course, or a course which is displayed as a drop on the student's academic record.

### PROMOTION

Students may not proceed to courses in a higher year unless they take concurrently all courses required to clear deficiencies in the lower years, subject to the limitations mentioned above. Students may proceed only to courses for which they have successfully completed prerequisites to the satisfaction of the department concerned.

### CHEATING

The standards and reputation of any university are the shared responsibility of its faculty and students. Within the obvious limits implicit in the difference between undergraduate work and specialized research, students at the University of Victoria are therefore expected to observe the same standards of scholarly integrity as their academic and professional counterparts. Clearly, a large part of the work done at the undergraduate level must involve the handling at second hand of ideas and material originally conceived or made accessible by others. Equally clearly, however, there is a difference between the use of an acknowledged restatement of such ideas and material after intelligent and critical assimilation and their unacknowledged, literal reproduction in the guise of new and original work. The latter amounts to cheating; and cheating, whether it take the specific form of *verbatim* and unacknowledged copying from the writing of others (also see Duplicate Essays, below), or whether it appears in other forms, such as the fraudulent manipulation of laboratory processes in order to achieve desired results, the use of commercially prepared essays in place of a student's own work or reference to unauthorized materials in examination circumstances, vitiates the purposes of a university education. While such practices may well stop short of "crime" in the sense that they may escape from the formal rigours of the law, they nevertheless constitute in all cases an offence against intellectual honesty. This renders forfeit not only the integrity of the individual involved but also the reputation of those who condone such lapses. Sanctions will therefore be enforced against cheating, ranging in severity as befits the individual case from simple reimposition of work, through forfeiture of credit for the particular assignment or the particular course involved, to possible suspension from the University in the most extreme, deliberate or persistent cases.

Offences of this kind may, however, occur in a multitude of different ways and circumstances in different disciplines, and, especially at the undergraduate level, their fair treatment will frequently entail the consideration of contingent factors. These require the flexible exercise of equitable jurisdiction at all levels from the individual instructor upwards. The University as a whole does not therefore propound a single comprehensive definition of cheating in all its shapes and forms beyond



the general statement of position and principle herein advanced; nor does it specify an invariable code of pains and penalties. It does, however, reserve to its academic departments severally the power, under normal circumstances, to inculcate and enforce proper standards of scholarly integrity by whatever internal procedures seem most appropriate to their respective disciplines, saving only that in matters involving student breaches of academic ethics, appeal may be made to the President if either party to the case so desires.

## IMPROPER BEHAVIOUR AND UNAUTHORIZED ACTIVITIES

Any student (a) whose behaviour causes or is likely to cause wrongful injury to any person or damage to the University or its property, or (b) who violates the British Columbia liquor regulations within the precincts of the University, or (c) who unlawfully enters a building on the campus, will be reported to the President for disciplinary action and may be suspended, subject to appeal to the Senate.

## SEXUAL HARASSMENT AND HARASSMENT

The University of Victoria is committed to providing an environment which affirms and promotes the dignity of human beings of diverse backgrounds and needs. The Policy prohibiting harassment ensures that all members of the University community — its students, faculty, staff, and visitors — have the right to participate equally in activities at the University without fear of harassment. The Policy is to be interpreted in a way that is consistent with these goals, with the principles of fairness, and with the responsible exercise of academic freedom as set out in the University of Victoria Tenure Document.

### 1. Sexual Harassment

The University of Victoria does not condone sexual harassment and seeks to prevent sexual harassment of all members of the University community.

1.1 Sexual harassment is defined as unwelcome sexual advances, requests for sexual favours or other verbal or physical conduct of a sexual nature when:

- (a) submission to such conduct is made either explicitly or implicitly a term or condition of employment or of educational progress; or
- (b) submission to or rejection of such conduct is used as the basis for employment or academic decisions affecting that employee or student; or
- (c) such conduct has the effect or purpose of unreasonably interfering with an employee's work performance or a student's academic performance or creating an intimidating, hostile, or offensive working or educational environment.

### 2. Harassment

2.1 The University of Victoria does not condone harassment and seeks to prevent harassment of all members of the University community.

2.2 Harassment is defined as the abusive, unfair, or demeaning treatment of a person or group of persons that has the effect or purpose of unreasonably interfering with a person's or group's status or performance or creating a hostile or intimidating working or educational environment when:

- (a) such treatment abuses the power that one person holds over another or misuses authority; or
- (b) such treatment has the effect or purpose of offending or demeaning a person or group of persons on the basis of race, colour, ancestry, place of origin, nationality, religion, family or marital status, physical or mental disability, age, sex, sexual orientation, or conviction for a criminal charge; or
- (c) such treatment has the effect or purpose of seriously threatening or intimidating a person.

### 3. Chilly Climate

3.1 The University of Victoria is committed to removing obstacles to participation in the University which are created by a chilly climate.

3.2 A chilly climate is defined as a hostile, offensive, or intimidating environment which has the effect of excluding from full participation in the University a person or group of persons on the basis of race, colour, ancestry, place of origin, nationality, religion, family or marital status, physical or mental disability, age, sex, sexual

orientation, or conviction for a criminal charge. A chilly climate is created by a combination of attitudes, practices, and structures rather than by isolated or discrete instances of harassment as defined in sections 1 and 2 of this policy.

The Harassment Policy and Procedures is administered by the Anti-Harassment Office (Human Rights). Persons who experience or know of harassment or discrimination may contact the Office by phoning 721-7007 or 721-8488 for confidential advice and information.

## GRADING SYSTEM

|                        | Grade Point Value |  |
|------------------------|-------------------|--|
| <b>Passing Grades:</b> |                   |  |
| A+                     | 9                 |  |
| A                      | 8                 | First Class  |
| A-                     | 7                 | (With Distinction)   |
| B+                     | 6                 |  |
| B                      | 5                 |  |
| B-                     | 4                 | Second Class   |
| C+                     | 3                 |  |
| C                      | 2                 | Pass   |
| D                      | 1                 | Marginal Pass  |
| *COM                   | N/A               | Complete (pass)  |
| <b>Failing Grades:</b> |                   |  |
| E                      | 0                 | Conditional supplemental   |
| F                      | 0                 | No supplemental  |
| N                      | 0                 | Did not write examination or otherwise complete course requirements by the end of the term or session; no supplemental |

### Temporary Grades:

|       |     |                         |
|-------|-----|-------------------------|
| * INC | N/A | Incomplete              |
| * DEF | N/A | Deferred status granted |
| * UNK | N/A | Unknown                 |
| * INP | N/A | In Progress             |
| * CIC | N/A | Coop Interrupted Course |

- \* COM — used only for 0 unit courses and those credit courses designated by the Senate. Such courses are identified in the course listings.
- \* INC — used for those Winter Session credit courses designated by the Senate, to be replaced by a final grade by June 1 (except for Education 799, by August 1). Such courses are identified in the course listings.
- \* DEF — Used only when deferred status has been granted because of illness, an accident or family affliction. (See below.) The work of the course must be completed by the end of Summer Studies for Winter Session courses, and by the end of the first term in the Winter Session for Summer Studies.
- \* INP — used only for courses designated by the Senate, to be replaced by a final grade by the end of the next Winter Session. If the student does not reregister then the final grade will be N. Such courses are identified in the course listings.
- \* CIC — see paragraph 14, page 39.
- \* UNK — used when grade is unknown.

For letter grades authorized for use in the Faculty of Graduate Studies and Faculty of Law, see entries under those faculties.

The table shown above constitutes the official University grading system used by instructors in arriving at final assessments of student performance.

### Numerical Scores:

A department may authorize the use of numerical scores or marks in courses, where appropriate, but each numerical score or mark must in the end be converted to a letter grade. Where a department authorizes the use of a numerical system in its courses, it is the responsibility of the instructor to inform the students in the course of the relationships between the departmental numerical system and the University letter grade system.



## EVALUATION OF STUDENT ACHIEVEMENT

### Assessment Techniques:

For the purposes of evaluating student performance, each department shall formally adopt those assessment techniques which the department considers generally appropriate for its courses, taking care to ensure that instructors within the department have some options.

Techniques commonly used, where appropriate, include the following: assignments; essays; oral or written tests, including midterms; participation in class discussions; seminar presentations; artistic performances; professional practica; laboratory examinations; "open book" or "take-home" examinations; and examinations administered by the instructor or Records Services during formal examination periods. Self evaluation is not permitted to determine the grade in any course, in whole or in part.

Final examinations, other than language orals or laboratory examinations, shall be administered during formal examination periods. Regardless of the techniques chosen by a department, tests counting for more than 15 per cent of the final grade shall not be administered, in any regular thirteen week term, during the last two weeks of classes or in the interval between the last day of classes and the first day of examinations, or, in any Summer Studies course, during the three class days preceding the last day of the course. Neither the department nor the instructor, even with the apparent consent of the class, has the right to set aside these regulations. No instructor may schedule any test that conflicts with the students' other courses or any examination that conflicts with the students' other examinations in the official examination timetable. No instructor may schedule any test during the last two weeks of classes in a regular thirteen week term unless an advance notice of six weeks has been given to the students in the course.

When beginning a course, the instructor is responsible for ensuring that the departmental chair and the students in the course are given in writing a course outline containing the course content and/or objectives, and which specifies the following information:

- a probable schedule with the due dates for important assignments and/or tests
- the technique or combination of techniques to be used in the assessment of students' performance in the course;
- how assignments, tests and other work of the course will be evaluated and the weight which generally will be given to each part of the course;
- of the relationship of the instructor's grading convention (letter, numerical, ...) with the official University grading system.

Reviews of final grades are governed by the regulations on page 21.

### Correction and Return of Student Work:

Instructors are normally to return all student work submitted that will count toward the final grade, except final examinations.

Instructors are to give corrective comments on all assigned work submitted and, if requested to do so by the student, on final examinations.

Where appropriate and practical, instructors should attempt to mark student's work without first determining the student's identity.

### Laboratory Work:

In any course which includes laboratory work students will be required to make satisfactory standing in both parts of the course. Results in laboratory work will be announced by the department concerned prior to the final examinations, and students who have not obtained a grade of at least D will be permitted neither to write the examination nor to receive any credit for the course. If satisfactory standing is obtained in the laboratory work only and the course is repeated, exemption from the laboratory work may be granted with the consent of the department. The same rules may, at the discretion of the departments concerned, apply to nonscience courses with laboratory work.

### Duplicate Essays:

An essay or assignment to be submitted for two courses is acceptable only when both instructors have been informed of the student's intention to submit a duplicate essay or assignment and have given their written permission to the student.

In instances where essays or assignments essentially the same in content are submitted in more than one course without prior written permission of the instructors, partial or total credit for the essay or assignment may be withheld in any or all of the courses involved.

### Term Assignments and Debarment from Examinations:

In some courses students may be assigned a final grade of N or debarred from writing final examinations if the required term work has not been completed to the satisfaction of the department concerned. Instructors in such courses shall advise students of the standard required in term assignments and of the circumstances under which they would be assigned a final grade of N or debarred from examinations.

### English Deficiency:

Term essays and examination papers will be refused a passing grade if they are deficient in English; and, in this event, students will be required to pass a special examination in English to be set by the Department of English.

### Examinations:

Examinations in the Winter Session are held in December and April. Timetables are posted on official University bulletin boards at least two weeks before the dates announced for the beginning of December and April examinations.

### Illness, Accident or Family Affliction at Examination Time:

- A student who falls ill during an examination or misses an examination because of illness, an accident, or family affliction may be eligible for a deferred examination.
- A student who, though suffering from illness, an accident, or family affliction writes a final examination may also be eligible for a deferred examination.
- A student may also apply for deferred status to complete required term work.
- In all the above cases a "Request for Academic Concession" must be applied for at Records Services normally within ten working days of the end of the examination period. Supporting documentation must accompany the request. Records Services will communicate with the department concerned for approval of deferred status. If deferred status is not granted, the instructor will submit a final grade. If deferred status is granted, the work of the course must be completed by the end of Summer Studies for Winter Session courses, and by the end of the first term in the Winter Session for Summer Studies courses.
- Deferred examinations are granted only where final examinations are involved. In cases where the instructor does not give a deferred examination but assigns a final grade based on an assessment of the student's performance in the course work, the grade will appear on the student's record with the notation "AEG" (Aegrotat, see Glossary, page 7).
- For courses finishing in April, deferred examinations are normally held about the beginning of August. For courses which finish in December and are prerequisite to courses starting in January, deferred examinations are normally held by the end of the first two weeks in January. For courses which finish in December and are also offered in the second term, deferred examinations may be given in April. For other courses, deferred examinations are scheduled by arrangement.
- The final grade obtained in a course in which deferred status has been granted will be used in calculating the sessional grade point average. If the work is not completed by the specified date, the final grade for the course becomes N.

### Regulations Governing Administration of University Examinations:

- Candidates may not enter the examination room until invited to do so by the invigilator in charge.
- Candidates are not permitted to enter the examination room after the expiration of one half hour, nor leave during the first half hour of examination. Invigilators should send unusual cases to Records Services, University Centre at once.
- Candidates shall not make use of any books or papers other than those provided by the invigilators or authorized by the instructor in charge of the course.
- Candidates shall not communicate in any way with each other. Candidates are not permitted to ask questions of the invigilator, except in cases of supposed errors in the papers.
- A candidate who believes there is an error in a paper should report it immediately to the invigilator, and, after the examination, report the error in writing to Records Services. If there are other reasons



- for complaint, the candidate should communicate with that office within 24 hours.
- Candidates may not leave the examination room without first delivering their examination booklets to the invigilator.
  - Candidates are advised not to write extraneous material in examination booklets.
  - Candidates who wish to speak to the invigilator should raise their hand or rise in their place.
  - Candidates may be called upon by an invigilator to produce identification papers bearing a photograph to prove their identity.
  - Candidates leaving or entering examination rooms should do so quietly in order not to disturb others. Having left the examination room, candidates are asked not to gather in adjacent corridors, lest they disturb candidates who are still writing.
  - Smoking is not permitted.
  - Candidates who fall ill during an examination should report at once to the invigilator.
  - Candidates who fall ill or suffer an accident or family affliction before an examination should report the circumstances immediately to Records Services.
  - In cases of extreme misconduct, invigilators are empowered to expel candidates from an examination room. Under such circumstances, candidates may be required to withdraw from the University following an investigation of circumstances surrounding the misconduct.
  - Invigilators may require candidates to remain quietly in their seats for the last 15 minutes of the examination.

#### Release of Grades:

Instructors are permitted to release final grades informally to students in their classes, on request, as soon as the grades have been forwarded to Records Services by the department, on the understanding that formal approval and release is the prerogative of the Senate.

Students records are confidential. Instructors may release grades only to the student concerned, unless they have the student's express permission to release the grades to a third party. Where grades are posted, student registration numbers and not names must be used.

Following authorization by the Senate statements of final grades are mailed to students by Records Services (about the end of May for Winter Session courses and early in September for Summer Studies courses).

First term results for full year courses are released by the instructors, not by Records Services.

#### Student Access to Final Examinations Under Review:

All final examinations are stored in the departmental office or in Records Services for 12 months after the official release of grades except when a review of an assigned grade or an appeal to the Senate Committee on Appeals is in progress. In the case of a review of an assigned grade the relevant material will be retained for a further six months. In the case of an appeal to the Senate the relevant material will be retained for six months after a final decision has been reached. Students are permitted access to final examination questions and their own answers on request to their instructors or departmental chairs after the grades have been submitted to Records Services by the departments. This access to the final examinations does not constitute a request for a review of an assigned grade. Students wishing to have grades reviewed should follow the procedure outlined in the following section. Students are allowed to purchase a photocopy of their own final examination answer papers and, unless withheld by the instructor with the agreement of the departmental chair, of the final examination questions.

#### Review of an Assigned Grade:

**Final Grades:** Reviews of final grades are governed by the following regulations, subject to any specific regulations adopted by the faculties:

- Any request for review of a final grade including the grade review fee (\$25.00) must normally reach Records Services within 21 days after the release of grades.
- Each applicant must state clearly in writing the grounds for believing that the grade awarded should be raised.
- Students should retain all written work returned to them by the instructor during the term and make such work available where the grade to be reviewed has involved such term work.
- It is the responsibility of each of the faculties to ensure that steps are adopted to be followed in the carrying out of reviews of grades assigned in courses offered within the faculty, and that such procedures provide for examination of the review results by a person or

persons not directly involved. Wherever possible, every effort should be made to complete the review process within 21 days after the receipt of the application for review.

- The grade determined by means of a review shall be recorded as the final official grade, irrespective of whether it is identical to, or higher or lower than, the original grade.

**NOTES:** Prior to application, a student considering a request for a formal review of a final grade ought to make every reasonable effort to discuss the assigned grade with the instructor. Mathematical marking errors will be rectified without recourse to the review procedures. (See Student Access to Final Examinations, above.)

Requests for review or other consideration based on compassionate grounds such as illness are governed by separate regulations (see Illness, Accident or Family Affliction, above).

Prospective applicants are advised that examination papers assigned E or F grades (and D grades in some faculties) are automatically read at least a second time before the grades are recorded. For that reason, an applicant who is eligible for a supplemental examination should prepare for the examination since a change in grade might not be available before the time of the supplemental examination.

#### Grades for Term Work:

During the session, students who believe that a grade awarded for term work is unfair should discuss the matter informally with the instructor concerned. If discussion with the instructor fails to resolve the matter, the student should appeal directly to the chair of the department.

#### Undergraduate Supplemental Examinations:

The following regulations apply to students in all programs except those in B.Eng., LL.B., Master's and Ph.D. programs (see regulations of the faculties of Engineering, Law and Graduate Studies).

Supplemental examinations are not offered by all departments. Students will be advised whether or not a supplemental examination will be offered when assessment techniques are announced at the beginning of the courses.

Where supplemental examinations are permitted by a department, they are governed by the conditions shown below and the regulations that follow:

- Students may apply to write a supplemental examination in a course only if they have written a final examination and have received a final grade of E in the course.
- Students taking 15 or more units in the Winter Session will be granted supplemental examinations only if they have passed at least 12 units of courses in that session. The maximum number of units of supplemental examinations allowed is normally 3. However, the Dean of the student's faculty may authorize supplemental examinations in an additional 3 units if the student will complete a degree by passing all the supplemental examinations granted.
- Students enrolled in Summer Studies courses or taking fewer than 15 units in the Winter Session may be granted supplemental examinations for no more than 3 units, each such case being judged on the basis of the student's overall standing by the Dean of the student's faculty.
- A student in the final year of a degree program who obtains a failing grade in a supplemental examination, may be granted a second such examination, at the discretion of the Dean of the student's faculty, if a passing grade in the second examination will complete the student's degree requirements.
- A student who obtains a grade of E in a course completed in December may, if eligible, either repeat the course in the Second Term if it is offered or write a supplemental examination in August.

Any passing grade obtained on a supplemental examination will be shown in the student's academic record with a grade point value of 1, corresponding to a D, and will be taken into account in the determination of the graduating average and the class of degree, but will not affect the sessional grade point average.

Supplemental examinations cover only the course work covered by written final examinations. If there was no written final examination in the course, or if a passing grade in a supplemental examination will not yield an overall passing grade in the course, a supplemental examination will not be provided.

Supplemental examinations for Summer Studies courses and for courses taken by students who are in attendance only during the First Term of the Winter Session are arranged in consultation with the Dean



who grants them. Supplemental examinations for all other courses taken in the Winter Session are written about the beginning of August.

Students who fail to write a supplemental examination at the scheduled time forfeit both their eligibility and any fees paid for the supplemental.

Applications for supplemental examinations, accompanied by the necessary fees, must reach Records Services by the following dates:

- (a) Courses taken by students in attendance only during the First Term, Winter Session — February 15;
- (b) All other Winter Session courses — July 1;
- (c) Summer Studies courses — October 15.

Supplemental examinations for courses mentioned in (a) and (c), above, are scheduled by arrangement. Those for courses mentioned in (b), above, may be written at the University as well as the following British Columbia centres: Campbell River, Cranbrook, Courtenay, Dawson Creek, Kelowna, Kamloops, Nanaimo, Penticton, Port Hardy, Prince George, Prince Rupert, Salmon Arm, Trail, Vancouver; and at Whitehorse, Y.T. Other centres outside British Columbia are restricted to universities or colleges.

For fees for supplemental examinations, see para. 7 (g), under Fees.

## STANDING

### Sessional Grade Point Average:

The sessional grade point average is based on all courses completed in a session which have a unit value. Courses bearing the grade COM are ignored.

(A grade point average is found by multiplying the grade point value of each final grade by the number of units, totalling the grade points for all the grades, and dividing the total grade points by the total number of units.)

### Academic Probation and Minimum Sessional Grade Point Average:

The following regulation applies in all Faculties. Individual Faculties may set higher grade point averages.

Undergraduates who fail to obtain a sessional grade point average of at least 2.00\* (or equivalent if a University of Victoria student takes courses elsewhere for credit towards a University of Victoria program) are considered to have unsatisfactory standing and will be placed on academic probation for the next session attended. Furthermore those students registered in a session in 4.5 units or more, whose grade point averages are less than 1.00 will be required to withdraw, normally for one academic year. If such a student has already started May-June courses or May-August courses, before notification of probation, these courses may be completed, but the student will be required to then withdraw, normally for one academic year.

Those students registered in a session in less than 4.5 units whose grade point averages are less than 1.00 will be placed on probation for the next session attended rather than being required to withdraw. A student who is placed on probation under these circumstances and who then registers in 4.5 units or less in the next session attended, and obtains a gpa of 2.00 or greater, will NOT be taken off probation automatically for the next session attended. A review will be made of the student's record by the Dean's office concerned, and the student will be informed of the Dean's decision.

A student who has a marginal record upon admission may be placed on probation by the Senate Committee on Admission, Re-registration and Transfer.

A student who is on academic probation and whose sessional grade point average falls below 2.00\* (or equivalent if a University of Victoria student takes courses elsewhere for credit towards a University of Victoria program) will be required to withdraw regardless of the registered unit total, normally for one academic year. The student will also be placed on academic probation for the next session attended.

A student who is required to withdraw a second time will not be permitted to register for credit courses at the University for at least five years.

Students who have been required to withdraw must apply for permission to re-register. Permission will normally be granted to those students who have:

- (a) completed the required withdrawal period, and
- (b) completed since their last registration at the University of Victoria a minimum of six units of transferable course work with a C+ average in all courses attempted.

Other students must appeal to the Senate Committee on Admission Re-registration and Transfer stating why they should be considered for re-registration.

In all cases students will be notified by Admission Services or Records Services that they have been placed on probation. Such students may wish to seek assistance from the appropriate Advising Centre or Faculty Dean's Office, Counselling Services, or to take the Reading Course and Study Skills Course or Workshops which are offered to all students by Counselling Services.

Depending upon a student's performance during the period of probation, the Dean may at any time either remove the student from probation for the remainder of the session, or acting on a decision of the faculty require that the student withdraw from the University. (See below: Withdrawal for Unsatisfactory Progress.)

Students who are on probation or whose standing is withheld (registered in 4.5 units or more) are not eligible for authorization or registration in the subsequent session until their current sessional grade point average has been determined. The exception to this is students whose projected grade point average for the session (including a grade of 0 for all deferred grades) is above the minimum required by the Faculty concerned; these students will be authorized.

This regulation governs all sessions, including Summer Studies (the period May through August).

\* Individual Faculties may set a higher grade point average.

### Limitations on Failing Grades

In addition to the regulations on Academic Probation and Minimum Sessional Weighted Average, the number of failing grades accumulated by a student is limited. Permission from the Dean is required to register in further coursework at this University after seven failing grades have been recorded on the student record.

### Cumulative Grade Point Average

The cumulative grade point average, which normally appears at the end of a transcript, is based on all courses (other than COM) taken or challenged at this University for which grades have been assigned (including F and N).

If a student takes courses beyond a first undergraduate degree, or transfers to the LLB program, a further cumulative grade point average will be calculated excluding those courses completed prior to the granting of the first degree or entry to the LLB program.

## WITHDRAWAL

A student may be suspended or may be required to withdraw from the University at any time for unsatisfactory conduct or for failure to abide by regulations. (See regulations of the individual faculties concerning mandatory withdrawal.)

### Voluntary Withdrawal:

Any undergraduate student who after registration decides to withdraw from the University must notify Records Services in writing. It is recommended that students visit Counselling Services to discuss their decision and plans and visit their Faculty Advising Centre to discuss their academic status and prospects, before going to Records Services. Students in the Faculty of Law should speak with the Dean. Students who are prevented by circumstances from withdrawing in person must do so by letter addressed to Records Services. Students will be required to obtain clearance from the University, to the satisfaction of Records Services, before being recommended, where applicable, for refund of fees.

Graduate students wishing to withdraw must apply in writing to the Dean of Graduate Studies.

(See Changes in Registration, page 14, paragraph 2, and dates on pages 4 and 5. Summer Studies students: See Summer Studies Supplement.)

### Withdrawal for Unsatisfactory Progress During a Session:

Any undergraduate student who has been placed on probation and whose progress is deemed unsatisfactory, may upon the decision of the faculty and on notification by Records Services, be required to withdraw from the University for the remainder of the session. A student so required to withdraw may appeal to the Senate for a review of the case by lodging a written appeal with the Secretary of Senate. (See Avenues of Appeal and Redress, page 16.)



## GRADUATION

### Application for Graduation:

Senate grants degrees in November and May each year. Each candidate for a degree, diploma or certificate must make formal application for graduation when registering in the final Summer or Winter Session preceding their anticipated graduation. Students who have received permission to complete a course or courses elsewhere must apply for graduation not later than July 1 for fall graduation or December 1 for spring graduation. Special forms for this purpose are available from Records Services.

Because of the delay in obtaining official transcripts, students completing their degree requirements at another institution during the second term of the winter session (January-April) are not eligible to graduate at May convocation. They must apply for a succeeding convocation. This regulation does not apply to students completing degree requirements in a program offered in partnership between the University of Victoria and a regional college.

### Minimum Degree Requirements for Graduation:

Each candidate for a first Bachelor's degree (in a faculty other than Law) is required:

- (a) To have satisfied the University English requirement (see page 15);
- (b) To present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 21 of the units must be numbered at the 300 or 400 level, and at least 30 of the units must normally be in University of Victoria courses. (See Limitations on Transfer Credit, page 12, Credit by Course Challenge, page 18, A Second Bachelor's Degree, below, and graduation requirements of the Faculty of Education.)
- (c) To meet the specific degree and program requirements prescribed by the undergraduate faculty in which the candidate is registered.

### Standing at Graduation:

- (a) Graduating Average

The graduating average of a student in a Bachelor's degree program other than B.Eng. and Law shall be determined as the weighted average of the grade values assigned to 300- and 400- (and in Education 700-) level courses (other than COM courses) taken or challenged at this University and acceptable within the degree program. Courses taken at the 500-level may be included in the graduating average, if they are accepted as credit towards the undergraduate degree. A course which has been used to satisfy the requirements for one degree or which has been used in the calculation of the student's graduating average for one degree, cannot be used for credit towards another degree. Students who have completed or plan to complete more than 30 units of upper level courses, some of which they intend to apply to the requirements of a second degree, must advise the Dean of their faculty at least two months before graduating from their first degree program (see A Second Bachelor's Degree, below).

Students must have a graduating gpa of at least 2.00 in order to graduate.

- (b) With Distinction

The notation "With Distinction" will be used on the degree parchment, the convocation programme, and transcript for those students whose graduating averages are 6.50 or higher and who have satisfied any additional requirements specified by the individual faculties and their departments with respect to standing at graduation.

## NOTICE

**Note: The fees shown below are those approved by the Board of Governors to February 28, 1995. Notice of any required changes will be given as far in advance as possible by means of a Calendar Supplement.**

### 1. PAYMENT OF ACCOUNTS

- (a) The obligation to pay fees for a course or program is incurred upon registration, subject only to adjustments for officially recorded course drops, withdrawal, cancellation of registration or change of status.

### Graduation Exercises:

The formal conferral of degrees takes place at a Convocation ceremony in the fall and spring each year. Graduates become members of the Convocation of the University as soon as their degrees are granted by the Senate.

## A SECOND BACHELOR'S DEGREE

Under the following conditions, a student who has a bachelor's degree from the University of Victoria or another recognized institution may be allowed to pursue undergraduate studies leading to a second bachelor's degree:

- (a) The student must be admissible to the program of the second degree.
- (b) The principal area of study or academic emphasis of the second degree must be distinct from that of the first degree.
- (c) At least 30 units of credit must be completed, beyond those units required for the first degree; normally, 21 of these 30 must be at the 300 or 400 level.
- (d) The student must meet all program and graduation requirements for the second degree beyond those required for the first degree.

In certain cases, it may be possible to complete the requirements of two University of Victoria degrees concurrently, subject in all cases to the conditions mentioned above; and in addition:

- (e) the Student must have completed all the requirements of one of the degrees and be within 15 units of completing the other before the first degree will be conferred.

Application to pursue a second bachelor's degree should be made at the time of application for admission or reregistration, as appropriate (see pages 9 to 14). Students currently enrolled in their first bachelor's degree program should make application to the Dean of the appropriate faculty.

The University reserves the right to limit the number of students admitted to the University for the purposes of completing a second bachelor's degree.

Note: students who have completed or plan to complete courses which they expect to apply towards the requirements for a second degree should check with the Deans of their faculties at least eight months before graduating from their first degree programs to determine if they will be able to include these courses in their second degree programs.

## TRANSCRIPT OF ACADEMIC RECORD

On written request of the student, a certified transcript of the student's academic record will be mailed by Records Services direct to the institution or agency indicated in the request. Each transcript shall include the student's complete record at the University to date. Since standing is determined by the results of all final grades in the session, transcripts are not available for first term grades until the end of the session, unless the student has attended the first term only.

Students' records are confidential. Transcripts are issued only at the request of students or appropriate agencies or officials.

All transcript requests must be accompanied by payment. Transcripts will be issued on or before 5 working days after the receipt of written application.

Transcripts will not be issued until all financial obligations to the University have been cleared.

Fees for transcripts of academic record: see para. 7 (h), under Fees.

## FEES

- (b) Students are requested to make their payments through bank branches or banking machines; forms for this purpose are inserted in Telephone Registration Guides or may be obtained at Accounting Services. Students paying through banking machines or bank branches should allow at least two weeks for funds to be transferred to Accounting Services. Payment may also be made by mail with cheque or money order (do not mail cash) made payable to the University of Victoria; the address is University of Victoria, Accounting Services, Box 3040, Victoria, B.C., V8W 3N7. Students may pay in person at Accounting Services, 2nd Floor, University Centre, but are reminded that queues will be long just prior to due dates.



- (c) An acceptance deposit is required for certain programs and all new students. See 2(a), 3(b) and 5(b) below.
- (d) Payment of fees is due by the following dates:  
 First term ..... September 30  
 Second term ..... January 31  
 Any additional fee charges resulting from subsequent changes in registration are due by the end of the month in which such changes are made.
- (e) Fees for a term comprise:  
 — full tuition for term courses taken that term,  
 — one half tuition for full year courses/programs taken that term, and  
 — any other fees assessed for that term.
- (f) Students are responsible for ascertaining the courses in which they are registered. When using the telephone registration system, students should always conclude their call by requesting to hear the list (L) of courses in which they are registered since fees will be assessed accordingly.
- (g) Students are also responsible for ascertaining their fees from this Calendar and any Calendar Supplements or from statements of account available at Accounting Services. Graduate students are also advised to consult Graduate Records about their initial assessments and the effect of subsequent changes in registration.
- (h) Statements of account are not mailed in advance, but may be collected at Accounting Services one week prior to September 30 and January 31. Payment must be made by due dates whether or not a statement of account is received. *Failure to pay full fees by October 31 in the first term or by February 28 in the second term can result in cancellation of course registrations and in denial of services (see (k) below).*
- (i) Payments must be received by the Accounting Services office by 4:00 p.m. on due dates (or on the preceding work day if the due date falls on a holiday or weekend). Note that banking machine payments will be accepted until midnight on due dates. **Please ensure that the correct student number is written on the face of all cheques.**
- (j) A service charge of 2% (but not less than \$2.00) is added to accounts not paid by their due date, and at each month end thereafter that they remain unpaid.
- (k) Students with overdue tuition or other accounts are subject to denial of services. These services include reregistration; addition of courses through telephone registration; use of libraries; access to classes and examinations; issue of loans, awards, grades, transcripts, degrees and documents certifying enrollment or registered status.
- (l) Students who have their registration canceled pursuant to (h) above, withdraw, or otherwise leave the University remain liable for settlement of unpaid accounts. The University may seek to enforce its rights as a creditor through legal action or the use of collection agencies. Legal and collection costs incurred by the University in this process are added to students' accounts.
- (m) Tuition receipts (T2202A) are issued in February for the preceding calendar year subject to (k) above. These forms are available for pickup at the University Centre foyer, usually the last week of February for students taking courses on campus at that date. Notices for dates will be posted early February. All other T2202A's are mailed to the students by the end of February.

## 2. FEES FOR UNDERGRADUATE PROGRAMS OTHER THAN LAW

- (a) All undergraduate students **admitted for the first time** to take credit courses must pay an acceptance deposit of \$100.00 to Accounting Services 24 hours prior to gaining access to the telephone registration system. This deposit is payable regardless of any loan, scholarship or sponsorship arrangements. It is applied to the student's fee account, but is forfeited if the student withdraws. If the deposit payment is returned NSF, the student's registration is cancelled.

- (b) Courses are assigned a fee unit value for the purpose of tuition fee assessment. This fee unit value is equal to the credit unit value except for the following courses:

|   | Credit<br>Units | Fee<br>Units |
|---|-----------------|--------------|
| All ART courses (except 150)  | 1.5             | 1.6          |
| All ART courses (except 350)  | 3.0             | 3.2          |
| All ART courses   | 6.0             | 6.4          |
| All ART courses   | 12.0            | 12.8         |
| A E 200, 201, 205, 208, 305, 306,<br>307, 308, 309, 310, 319, 320,<br>321, 322, 402A, 402B, 402C,<br>402D, 402E, 402F, 402H | 1.5             | 1.7          |
| A E 204   | 2.0             | 2.3          |
| A E 103, 303  | 3.0             | 3.4          |
| Faculty of Business courses   | 1.5             | 1.9          |
| Faculty of Business courses   | 3.0             | 3.7          |
| C Y C 310 (Distance Ed.)  | 4.5             | 6.0          |
| C Y C 360   | 1.5             | 2.2          |
| C Y C 410 (Distance Ed.)  | 4.5             | 6.0          |
| C Y C 460 (F50)   | 1.5             | 2.4          |
| COM 205   | 0               | 1.9          |
| ED-B 359 (F04, F46)<br>(Y50) (Y51)  | 1.0             | 1.2          |
| ED-B 359<br>(F01, F02, F03, S01, S02, S03)  | 1.5             | 1.7          |
| ED-B 360, 361   | 1.5             | 2.0          |
| ED-E 499 (F50)  | 1.5             | 2.5          |
| ED-P 494  | 1.5             | 3.5          |
| ED-P 497  | 1.5             | 3.5          |
| ED-P 497  | 3.0             | 6.5          |
| ENG 099   | 0               | 3.0          |
| ENGL 414  | 1.5             | 1.8          |
| ELEC 395, ENGR 446<br>All other ENGR, CENG, ELEC<br>and MECH courses  | 1.0             | 1.1          |
| F A 315 (F50, S50)  | 1.5             | 1.6          |
| Film Studies courses  | 1.5             | 4.6          |
| Film Studies courses  | 1.5             | 1.8          |
| Film Studies courses  | 3.0             | 3.6          |
| GEOG 325  | 1.5             | 1.8          |
| H A 488, 489  | 1.5             | 3.9          |
| LING 099 (F01, S01)   | 0               | 3.0          |
| LING 099 (Y01)  | 0               | 6.0          |
| MUS 140, 240, 340, 440  | 2.0             | 2.4          |
| MUS 145   | 3.0             | 3.7          |
| MUS 245, 345, 445   | 6.0             | 6.7          |
| NURS 309 (F50, F51, S50)  | 1.5             | 2.2          |
| P E 126   | .5              | .7           |
| P E 127   | .5              | 1.2          |
| P E 129, 130  | .5              | .8           |
| P E 128, 132  | .5              | 1.5          |
| P E 131   | .5              | 1.8          |
| RUSS 304  | 1.5             | 1.8          |
| THEA 251, 252, 355, 356, 351, 352,<br>362, 363, 348, 349  | 1.5             | 1.7          |

- (c) Tuition, per fee unit ..... 142.00
- (d) Course challenge, per fee unit ..... 71.00  
 May be waived for students who have completed a noncredit diploma program and paid equivalent credit program fees - apply to Continuing Studies
- (e) Coop program, per work term ..... 305.00
- (f) Coop work term challenge ..... 152.50
- (g) UVic Students Society and Athletics/Recreation fees:  
 Students taking on campus courses, per term  
 4.5 credit units      Less than  
    or more      4.5  
    credit units
- |                                   |       |       |
|-----------------------------------|-------|-------|
| UVic Students' Society - activity | 37.45 | 18.97 |
| - building fund                   | 22.50 | 11.00 |
| Athletics/Recreation              | 26.50 | 13.25 |
| Education Students Association    | 7.50  | —     |
| Engineering Students Society      | 20.00 | —     |



The ESS fee may be refunded in November and March by applying directly to the respective professional development union. The EdSa fee may be refunded by the Society upon any student's request to the EdSa Executive during the first two weeks of classes of each semester.

- (h) UVic Students' Society (UVSS) Health Plan  
Students taking on campus courses —  
3 or more credit units in the first term,  
or 6 or more credit units in the session  
(including first term units) ..... 112.50  
3 or more credit units in the second term  
(but no first term units) ..... 75.00  
3.0 total credits for both terms ..... 75.00  
Students must initially pay their premiums but can apply before  
14 October (10 February in case of second term) through the  
UVSS to opt out of the plan and obtain a refund if they carry  
acceptable alternative coverage. Students should inquire  
through the UVSS regarding optional family coverage under  
this plan. Students' Society Health Plan coverage is supplement-  
al to and is not a replacement for the B.C. Medical Services  
Plan which provides basic primary coverage for those eligible  
B.C. residents who apply and pay premiums.
- (i) Students applying to graduate  
Graduation ..... 30.00  
UVic Students Society graduating class ..... 10.00

### 3. FEES FOR FACULTY OF LAW

- (a) Application ..... 45.00  
(b) First year acceptance deposits  
Upon acceptance \$200.00 (\$100.00 refundable if student with-  
draws by April 15)  
By June 10 a further \$200.00 (\$100.00 refundable if student  
withdraws by August 15)  
(c) Tuition -full time, per term ..... 1,362.00  
full time is defined as 6 or more fee units per term  
-part time, per fee unit ..... 180.00  
(d) Coop program, per work term ..... 325.00  
(e) Law Students Society, per term ..... 10.00  
(f) Athletics/Recreation, UVic Students Society and Graduation  
fees  
As shown in Section 2.

### 4. FEES FOR VISA STUDENTS

- (a) Visa students (those not holding Canadian citizenship or landed  
immigrant status at the commencement of the session) are  
required to pay tuition fees at 3 times the rates for undergraduate  
courses (which includes program fees).  
(b) Where reciprocal agreements exist, visa students are exempted  
from these differential fees.  
(c) No differential fees are charged for Fine Arts 315 (off-campus);  
History in Art 486, 487, 488, 489, 490 and 491.  
(d) Faculty of Business — Bachelor of Commerce International  
Academic Program for all visa students. Additional program  
fee of \$1,200.00 per year — may be assessed in three install-  
ments of \$400 per term.  
(e) Sickness and hospital insurance fee (subject to change) - see  
Health Services, page 29:  
Undergraduates and graduates up to age 30 ..... 121.00  
Graduates over age 30 ..... 218.00  
(f) International student application fee ..... 60.00

### 5. FEES FOR GRADUATE PROGRAMS

There is a minimum fee for all graduate degree programs. The unit of  
payment is a "fee installment." The minimum program fee for a  
Master's degree is 5 full fee installments (or a combination of full and  
half installments amounting to a total of 5 full fee installments). The  
minimum program fee for a Ph.D. degree is 7.5 full fee installments (or  
a combination of full and half installments amounting to a total of 7.5  
full fee installments). See (e) and (f) below for details.

Fees are charged for every term that a student is registered in a degree  
program. For this purpose, a "term" means all or part of one of the  
following periods: September-December; January-April; May-August.  
Students classified as "full time" will be charged a full fee installment  
(see (c) below). Students classified as "part time" will be charged a half  
fee installment (see (c) below).

Students classified as "nondegree" pay for courses on a per unit basis  
(see (b) below).

- (a) Graduate application fee ..... 45.00  
(b) Acceptance deposit ..... 100.00  
Forfeited if student does not register, but \$50.00  
refundable if withdrawal of application received  
28 days prior to classes.  
(c) Tuition:  
full fee installment (per term) ..... 908.00  
half fee installment (per term) ..... 454.00  
non-degree (per unit) ..... 304.00  
(d) There are additional fees for the following courses. These fees  
do not form part of the minimum program fee required under  
paragraphs (d) or (e).  
Music 540 ..... 48.25  
Music 545 ..... 95.50  
Theatre 508, 509, 510, 520, 521, 523 (3 units) ..... 48.25  
(1½ units) ..... 24.25

There is an additional program fee of \$400 for five terms for  
full and part time students enrolled in the MBA program. This  
fee does not form part of the minimum program fee for a  
Master's degree.

- (e) Payment of 5 full fee installments is required for the Master's  
degree.  
(f) Payment of 7½ full fee installments is required for a Doctoral  
degree. Students who transfer from a Master's to a Doctoral  
program, without completing the Master's degree, will have  
those fee installments paid during the first 16 consecutive  
months of the Master's program credited to their Doctoral fee  
requirement. Any fees paid after this time cannot be credited to  
the Doctoral fee requirement.  
(g) If the minimum number of fee installments for their degree have  
not been paid by the final session before graduation, students  
must pay the outstanding installments at the time they complete  
final degree requirements. Students owing outstanding fee  
installments will not be awarded their degree until payment is  
made. Students expecting to complete their academic require-  
ments are strongly advised to contact the Graduate Admissions  
and Records Office to clarify their fee installment status.  
(h) Registration fees are required from students who have paid the  
fee installments for their degree but have not completed pro-  
gram requirements. They are assessed after: 24 months from  
the start date of the Master's program (excluding M.P.A. and  
M.B.A. students, for whom the installment point will be 36  
months if in the regular program, and 48 months if in the  
concurrent LL.B/M.P.A. program); 36 months from the start  
date of the Doctoral program. Students enrolled in the cooper-  
ative education option will have 8 months added to the relevant  
Master's time period and 12 months added to the relevant time  
period for the Ph.D.  
Reregistration fees are assessed according to the following  
schedule:  
Until usual completion  
limits under regulation 5.2, per term ..... 304.00  
Thereafter, per term ..... 908.00  
(i) Tuition fees paid by nondegree students do not count towards  
the fee installment requirement for a degree.



- (j) Cooperative program fee, per work term..... 325.00  
This fee does not form part of the minimum program fee required under paragraphs (e) or (f).
- (k) Athletics/Recreation, per term ..... 26.50
- (l) Graduate Students Society, per term  
Activity..... 24.50  
Building Fund..... 13.50
- (m) Graduation..... 30.00
- (n) Visa student sickness and hospital insurance fee -  
see 4(e) above.
- (o) Master's: Binding only ..... 15.00  
Master's: Binding and Microfilming ..... 50.00  
Ph.D. Dissertation ..... 50.00
- (p) Application to re-register ..... 22.50

#### 6. FEES FOR AUDITORS

- (a) Under age 65, per fee unit -undergraduate..... 71.00  
-graduate ..... 152.00
- (b) Age 65 or over, per fee unit -undergraduate..... 24.00  
-graduate ..... 50.00

Note: For graduate students, audit fees are extra to any tuition fees charged.

#### 7. MISCELLANEOUS FEES

- (a) Undergraduate application for admission ..... 20.00
- (b) Document evaluation ..... 35.00
- (c) Late application/registration ..... 35.00
- (d) Application to reregister ..... 10.00
- (e) Returned cheque..... 15.00
- (f) Reinstatement: 10% of unpaid account  
(minimum \$25; maximum \$75)
- (g) Supplemental examination, per paper -on campus ..... 45.00  
-off campus..... 55.00
- (h) Transcripts, per copy ..... 5.00
- (i) Education Deduction and Tuition Certificate replacements  
and fee payment confirmations ..... 4.00
- (j) Calendar mailing charges  
- overseas ..... 15.00  
- U.S.A. .... 10.00  
- inside Canada ..... 8.00
- (k) Language 11 Equivalency Test..... 152.50
- (l) Graduation certificate -replacement ..... 50.00  
-certified copy ..... 10.00
- (m) Document fee - per copy ..... 2.00
- (n) Grade review fee  
Refundable if grade review successful ..... 25.00
- (o) Application for second degree or  
for change of degree status ..... 5.00
- (p) Degree completion letter ..... 3.00

#### 8. FEE REDUCTIONS FOR DROPPED COURSES, WITHDRAWAL, CANCELLATION OF REGISTRATION AND CHANGE OF STATUS

- (a) To obtain fee reductions, students must drop courses, by either using telephone registration or submitting written notice of changes in registration to Records Services or Graduate Records when they take place. Where fee reductions are granted, they will be based on either the date recorded in the telephone registration log or on the date that written notice is received. Students should *not* rely upon instructors to make course drops on their behalf. It is *strongly recommended* that students recheck their course registration status using the list function (L)

on telephone registration before the full fee reduction deadlines, particularly if they have made course changes or been waitlisted.

- (b) Deadlines for obtaining fee reductions are different from academic drop deadlines.

- (c) **TUITION FEE REDUCTIONS**—undergraduate students and auditors in undergraduate courses.

First term courses and first half of full year courses

|                           |      |
|---------------------------|------|
| On or before September 19 | 100% |
| October 10                | 50%  |

Second term courses and second half of full year courses

|                         |      |
|-------------------------|------|
| On or before January 21 | 100% |
| February 11             | 50%  |

For courses with unusual start dates or shorter durations, tuition fee reductions are as follows. Days shown are calendar (not lecture).

| Duration   | 100% reduction | 50% reduction |
|------------|----------------|---------------|
| 1-5 days   | First 0 days   | Next 0 days   |
| 6-14       | 1              | 0             |
| 15-31      | 5              | 0             |
| 32-62      | 7              | 7             |
| 63 or more | 14             | 21            |

All tuition fee reductions are subject to retention of the acceptance deposit described in 2(a).

- (d) Tuition fee reductions—graduate students and auditors in graduate courses.

First term assessments

|                           |      |
|---------------------------|------|
| On or before September 19 | 100% |
| October 10                | 50%  |

Second term assessments

|                         |      |
|-------------------------|------|
| On or before January 21 | 100% |
| February 11             | 50%  |

- (e) Athletics/Recreation and Students Society fees will be reduced by 50% where students submit a withdrawal form or letter of withdrawal to Record Services by October 10 or February 11.

- (f) Appeals — Students believing a course drop has not been properly entered in their student record should contact Records Services. Students believing a course drop fee reduction has not been correctly entered in their fee account should contact Accounting Services. In extenuating circumstances such as illness, family affliction, accident, etc., appeals should be made at the appropriate Advising Centre. If, following the student taking the above action, it is felt there is a basis for an appeal of an unresolved fee reduction issue, the student may submit such appeal in writing to the Fee Reduction Appeals Committee, c/o Manager of Treasury Services, 2nd Floor, University Centre.

#### 9. GENERAL FEE REGULATIONS

- (a) The University reserves the right to change fees without notice.
- (b) Students registering in Summer Studies should consult the Summer Studies Calendar Supplement.
- (c) Proceeds of undergraduate awards received or granted by the University are credited to fee accounts.
- (d) First term overpayments and other credits are applied to second term fees owing and will not be refunded when there is an outstanding second term balance. Payments and other credits in excess of sessional fee charges are applied to other unpaid accounts or to the next session if a student is registered in the following session. Any remaining credit balance for a session is refunded on request.
- (e) Tuition fees for credit courses are exempt from the Goods and Services Tax (GST) but GST may be exigible on certain other fees.



## ACADEMIC SERVICES

### UNIVERSITY OF VICTORIA LIBRARIES

The McPherson (main) Library contains over 1.6 million volumes, 1.7 million items in microform, 4,500 current subscriptions, 42,000 sound recordings, 28,000 scores, and 4,000 films and videos. The Curriculum Laboratory, which serves student teaching requirements in the Faculty of Education, has over 35,000 volumes, as well as a substantial collection of non-book materials. The Diana M. Priestly Law Library contains over 138,000 volumes and 56,000 microforms to meet the learning, teaching and research requirements in the Faculty of Law. More than 60,000 maps and 80,000 aerial photographs are accessible in the Cartographic Resource Centre. The Electronic Library in the Faculty of Business provides networked access to full text and abstracting databases of more than 1,200 publications.

With few exceptions, notably manuscripts, rare books, and media requiring special housing or handling, all resources are housed in open stacks. VICTOR, the online public catalog to library materials as well as periodical article indexes and Internet resources via The Gateway, can be used to access the collection within the library and via office terminals or home computer modems. Special facilities are provided for the use of audio visual, microform, CD-ROM, and software materials. Experienced staff are available to assist students and faculty in taking fullest advantage of the Libraries' resources. Individual or group instruction is available upon request.

### ACADEMIC ADVISING

Each of the undergraduate faculties provides an academic advising service for students contemplating enrollment in programs offered at the undergraduate level. The Advising Centre of the Faculty of Arts and Science is located in room A117 in the Clearihue Building. The Advising Centre of the Faculty of Education is located in room A250, MacLaurin Building. Students in the Faculty of Fine Arts are referred to the Office of the Dean of the Faculty, Room 116, Fine Arts Building, for information regarding academic advice. Students in the Faculty of Engineering or Human and Social Development are referred to the individual departments or schools. Students in the Faculty of Business should inquire at Reception, Room 402, H.S.D. Building.

### SPECIAL COURSE IN ENGLISH AS A SECOND LANGUAGE

The Department of Linguistics offers a noncredit course in English for students whose native language is not English. For details see Linguistics 099 on page 118 of the Calendar.

### COMPUTING FACILITIES AT THE UNIVERSITY OF VICTORIA

The University of Victoria offers an extensive range of computing services for students and faculty members. The main computing facility

is located in the Clearihue Building and includes an IBM 3090-180S and a SUN 690MP system. Except for scheduled maintenance periods, these systems operate throughout the year on a 7 day, 24 hour basis, to allow usage of services whenever required. Access to these systems is provided by terminals, microcomputers and workstations distributed throughout the campus utilizing broadband and Ethernet communication facilities. Also, the computers are connected to the BCnet, CA\*net, Datapac, UUCP, NSFnet, and Internet networks, allowing access to and from systems in many other parts of the world.

Interactive and batch software services are supported on the IBM processor by the VM/ESA and MVS/ESA operating systems. Programming languages in common use include C, COBOL, FORTRAN, and PL/I. Special purpose software includes the ADABAS, BMDP, DI-3000, GDDM, KERMIT, SUPERCALC, FOCUS, Minitab, NAGLIB, Natural, SAS, SAS/GRAPH, Script, SHAZAM, SIR/DBMS, SPSS-X, TEX, and TSP packages.

The UNIX operating system is used on the SUN system. Programming languages include C, CPROLOG, FORTRAN, LISP, Modula-2, and PASCAL. Special purpose software includes the Dittorf, Ean, Ingres, Macsyma, Matlab, TEX, and Writer's Workbench packages.

In addition to these main facilities, Computing and Systems Services operates laboratories and classrooms equipped with IBM and Apple microcomputers and with computer terminals. Many other departments on campus have installed and operate their own systems in support of their specific activities, and these include microcomputers, SUN servers and workstations running UNIX, VAX servers and workstations using VMS, and various special purpose systems for unique applications.

A wide range of training, support and consultation services are offered to members of faculty and to graduate students. Further information regarding these services is available from the Computing User Services Help Desk in Clearihue C143. Computing User Services also operates a Computer Store in Clearihue C143. Apple, IBM, Microsoft, and DELL personal computer products are available for sale to students, faculty, and staff at discounted prices.

Undergraduate and graduate students use the computing facilities to complete assignments in many different courses. Research users include faculty members from nearly all academic departments at the University. New applications in computing are continually being developed for teaching and research purposes, and a major objective of Computing & Systems Services is to provide adequate support for the computing requirements of academic programs.

In addition, the information processing requirements of the McPherson Library, Accounting Services, and Admission and Student Records Services are supported. These and other administrative departments make regular use of computing facilities for Library administration, circulation controls, payroll, budgets, accounts payable, and student records.

## STUDENT AND ANCILLARY SERVICES

Student and Ancillary Services is that segment of the University dedicated to the support of students in the achievement of their academic goals. The division is concerned on a day-to-day basis with student life and learning opportunities outside the classroom. Programs and services are designed to facilitate personal growth, exploration of talent and abilities, and organization development in support of the University community. The division collaborates with the undergraduate and graduate student societies in developing and promoting a wide range of services and activities. Student are encouraged to become familiar with the offerings of Student and Ancillary Services' departments and utilize the programs to maintain a healthy, positive, and successful program of study.

### ATHLETICS AND RECREATIONAL SERVICES

The Department of Athletics and Recreational Services at the University of Victoria provides a comprehensive program of sports and recreation for all students, faculty and staff at the University.

#### Recreation

The Recreation program provides the opportunity to learn a new skill and/or expand one's talents through unique programming that includes: instructional classes, special events, aquatics, racquet sports, aerobics, outdoor recreation, intramural sports, recreational clubs and employee fitness. Classes in these activities are offered each term for a nominal fee. The intramural program provides co-educational competitive and recreational activities in sports such as volleyball, basketball, soccer, ice hockey, etc. Special events include fun runs, squash tournaments, aerobathons, triathlons and family skating.

#### Athletics

The Athletics program is available for full time students at the University. Athletically gifted students are provided with high quality coaching and high levels of competition that permit them to pursue athletic excellence while pursuing studies at the University. Sports offered include basketball (men and women), middle distance (men and women), women's field hockey, rowing (men and women), men's



rugby, soccer (men and women), swimming (men and women) and volleyball (men and women). The University is a member of the Canadian Inter-university Athletic Union and the Canada West University Athletic Association.

#### Facilities

Use of the facilities or participation in the programs of Athletics and Recreational Services is open to full time students and to faculty and staff who have acquired an ARAC membership card. Family memberships for faculty, staff and students may also be purchased. The McKinnon Building includes a gymnasium, dance studio, weight training room, 25 meter L-shaped pool, squash courts, fitness testing area, and change and shower facility. The UVic Gordon Head Complex includes a fieldhouse, gymnasium, large fitness/weight centre, 25 meter outdoor pool, tennis, squash, racquetball and badminton courts, an ice rink, and a restaurant/lounge as well as changing and shower facilities. The Outdoor Recreation Centre is also located there and equipment is available to members on a rental basis. There are several playing fields, a large stadium, tennis courts and miles of jogging trails through the woods around campus and along Cadboro Bay. A sailing compound, the Simpson Property and the Elk Lake Rowing Centre are also available.

### BOOKSTORE

The Bookstore, located in the Campus Service Building, is owned and operated by the University and, in keeping with University policy, operates on a break even basis.

All required and recommended textbooks are stocked by the Bookstore according to faculty requests.

In addition, the general book section contains 20,000 titles in paperback and hardcover editions to provide background reading, reference material for essays and up to date reading of interest. Special orders may be placed for any book currently in print. The Bookstore also distributes academic calendars and handles regalia rentals.

#### General Information:

Texts may be returned for refund within 5 business days of purchase. Such books must be in mint condition, unless marked as used when purchased. Students with a receipt may be granted a return extension for texts purchased for dropped courses until October 31 for fall/full year courses and February 28 for spring courses. A receipt must accompany each refund request.

In each term return privileges will be suspended as follows: fall/full year courses — October 31, spring courses — February 28, summer courses — July 31. May-June courses — special dates will be posted. General books, accompanied by receipt, may be returned for refund within five days from date of purchase.

Sale books and student outlines may not be returned.

Between April 15 and the first day of classes in September, and between December 1 and the last day of the week before classes begin in January, the Bookstore buys used textbooks at half the retail price according to a "want list" prepared from faculty requisitions.

The Bookstore Policy Advisory Committee, composed of faculty and student members, will be interested in any comments regarding the store.

The General Merchandise Department offers school and art supplies, gym strip, calculators, lab coats, crested ware, drugstore and gift items, magazines, greeting cards, stationery, games, hosiery, and sporting goods. Returns (with the exception of bathing suits) are accepted with the receipt within five days of purchase. Merchandise must be in original condition and packaging should be unbroken. Additional services are film processing and dry cleaning service and a personal computer outlet.

#### Sub Post Office:

A Post Office Franchise is located to the right of the Bookstore entrance. Services provide postage, money orders, parcel post and registered mail.

### INTERFAITH CHAPLAINCY

Chaplain Services is pleased to make available to the University students, faculty and staff, an Interfaith Team (Christian, Buddhist, Muslim) representing a variety of religious traditions.

The office, located in the University Centre, Room B228, is open Monday to Friday, 8:30 a.m. to 4:30 p.m. Chaplains can be contacted through the office.

Chaplain Services provides the following special interest programs: Marriage Preparation (Growth Together), Marriage Enrichment (Growing Together), Student Retreats, Sessions in Spirituality, Small Groups, Worship Services, Pastoral Counselling and Biblical, Theological and Value Studies. Check the notice board in our office for upcoming events.

#### University Interfaith Chapel:

The University provides an Interfaith Centre for the purpose of religious celebrations and worship for all faiths. The Chapel also has a Meditation Room. The Chapel is open from 8:30 a.m. to 5:30 p.m. Monday to Friday while classes are in session.

### COUNSELLING SERVICES

Counselling Services offers free, confidential counselling to students who have personal, career, learning, or educational concerns.

#### Educational and Career Counselling

Many students are unsure of their educational and career goals. Some do not know what they want to major in, what careers a given major might lead to, or which careers would best suit them. Others find it difficult to choose between several majors or possible careers and do not know how and where to find reliable information about different occupations, careers, or educational paths. Counsellors see such students individually or in groups and use various materials and tests to help them clarify their interests, abilities, needs, values, goals, and personal characteristics. Then they help the individuals to locate information about those occupations that best match them and their goals.

#### Counselling for Study and Learning:

It is normal for difficulties to arise in response to the more demanding and varied learning tasks required in a university. Often the strategies of learning that were successful in high school do not work very well in a university. Individual counselling is provided to assist students to develop and refine their ways of learning, as well as to manage the difficulties that arise in adjusting to university demands — difficulties such as inadequate retention, inefficient reading, exam anxiety, poor time management, procrastination, inability to concentrate, and so on. It is recommended that students enroll in one or more of the activities shown below in order to prevent academic problems rather than have to correct them later, when under pressure.

**University Learning Skills Course** — This noncredit course is offered throughout the year. It is designed to help students develop better techniques for reading, for listening, for organizing and learning material, and for writing essays and exams.

**Study Groups** — On request, Counselling Services will arrange a regular meeting place on campus for a Study Group and/or show students how to use group study to enhance learning.

**Workshops** — During the Fall and Spring semesters workshops are offered on topics such as Time Management, Reading Efficiency, Exam Writing, Note Making, and Essay Writing.

**Special Learning Skills Course for New Students** — This special version of the University Learning Skills course is offered in August. It helps new and mature students to cope with the transition to university learning. Contact Continuing Studies for dates and times.

#### Personal Counselling:

Professional Counsellors provide a confidential atmosphere in which students can explore any topic or situation and discuss any concerns they may have. Some of the personal problems which students bring to Counselling Services are shyness, lack of self confidence, difficulty communicating with and relating to others, inability to speak up and express themselves, family and relationship conflicts, loneliness, grief, sexual concerns or abuse, depression, anxiety, stress, sexual orientation issues, alcohol and drug concerns, loss of interest, difficulty in making decisions and coping with the university experience. Students are helped to work through their problems, to develop self awareness, and to overcome problems by using new coping strategies.

#### Group Programs:

In addition to individual counselling, counsellors offer a number of group programs. Students may arrange to join a particular group by contacting the Counselling Services.



**Career Testing and Planning** — To assist students in exploring career options and making realistic plans.

**Class Participation/Public Speaking** — To help students develop presentation, seminar skills and self confidence in the classroom.

**Essay Writing** — To deal with the steps in writing essays and reports with individual follow up.

**Exam Writing** — Highlighting tips for preparing and writing all types of exams.

**Note Making** — Lecture notes, study cards and SAFMEDS.

**Reading Efficiency** — Introduction to effective reading comprehension and remembering.

**Time Management** — To gain control of one's time, set goals and priorities, control procrastination and improve performance.

**Assertion Training** — To learn and practise standing up for rights, expressing feelings and beliefs, overcoming shyness and taking an active approach to life.

**Enhancing Self Esteem** — To gain a more positive picture of oneself and build self confidence.

**Eating Disorders** — To develop problem solving skills and healthy eating patterns.

**Relaxation Training** — To learn and practise relaxation skills.

**Stress Management** — To develop strategies to reduce and prevent stress.

**Migraines** — To overcome or reduce migraine headaches.

**Thesis/Dissertation Completion** — To help graduate students succeed with thesis and dissertation projects through daily goal setting, performance management, and weekly meetings.

#### **New Student Information Centre:**

The New Student Information Centre is located in Counselling Services. It is staffed by trained Peer Helpers who are familiar with UVic. They will help students find the answers to ANY questions they have about UVic.

#### **Advanced Educational Testing:**

Counselling Services is authorized to administer the Scholastic Assessment Test I and II, the Dental Aptitude Test, the Graduate Management Admission Test, the Graduate Record Examination, the Law School Admission Test, the Medical College Admission Test, the Miller Analogies Test and the Test of English as a Foreign Language.

#### **Appointments:**

Counselling Services are open and available to all students at the University of Victoria. For further information, students should telephone 721-8341, write or come to Counselling Services, located in the University Centre on the second floor, room B202.

#### **Peer Helping:**

Peer helpers are trained student volunteers who offer confidential support to students in a variety of ways. They staff a Drop-in Centre, conduct outreach programs, maintain a Drug and Alcohol Awareness Resource Centre, and more. For further information on this program, or to seek assistance, call 721-8343, or drop by the lobby of Counselling Services, Monday to Friday, 8:30 to 4:30 (University Centre B202b).

## **CHILD CARE SERVICES**

Three cooperative full-time centres for students, staff or faculty are located on campus in Complex "A". These centres are licensed to take children between the ages of eighteen months and five years. Complex "B" houses a licensed out-of-school program for children aged six to twelve years. The Provincial government pays subsidies, based on income, toward the fees of these non-profit centres which are staffed by trained personnel. If a student is not eligible for government subsidy or when the subsidy does not cover day care costs, the student is then advised to contact the University Student Financial Aid Office on campus if the student cannot meet day care expenses. Registration is limited. Application should be made several months in advance of the date day care services are required. Inquiries and applications should be made to the Manager, Child Care Services (721-8500) or (721-6656).

## **FOOD SERVICES**

The University operates a comprehensive food service facility in the Cadboro Commons Building. The Coffee Gardens and the Raven's Wing and Pizzeria are located on the main floor of the building to

provide meals and snacks to all members of the University community. Residents' meals are served in the Cadboro Commons Dining Room located on the second floor of the building. A full residence food program is provided on an a la carte plan. A similar meal plan designed for economy, flexibility and convenience, is available for nonresident students, faculty and staff. Additional cafeteria and dining facilities are located in the University Centre, the Begbie Building, Gordon Head Complex, and the George and Ida Halpern Centre for Graduate Students. Tim Horton's, offering soup, sandwiches and baked goods, is located in the MacLaurin Building. Supplementary food service is provided by banks of vending machines in the MacLaurin and Elliott Buildings, and by individual machines located throughout the campus. The Department of Food Services provides catering for all occasions and for both on campus and off campus groups. For further information contact Food Services general office, Craigdarroch Office Building or call 721-8433.

## **HEALTH SERVICES**

The Health Services Building is located at the South East corner of Parking Lot No. 5.

Hours are 8:30 a.m. - 4:30 p.m., Monday to Friday except Tues. 9:30 a.m.

In addition to the medical services required in direct support of various university activities and programs, the Health Services offers general medical treatment, health counselling, nutritional consultations, physiotherapy, dermatology, sports medicine clinics and psychiatric services for the benefit of students. While these services may be utilized by any student, they are offered primarily for the convenience of those students who do not have a regular physician in the Victoria area. Students are responsible for the cost of any such medical services provided, and students not having valid insurance coverage will be billed directly.

#### **Physiotherapy Services**

Physiotherapy services are available by appointment only. Doctor referrals are no longer required, but are recommended in some cases. Physiotherapy treatments can be billed directly to Medical Services Plan of BC or Alberta Health Care. Students with coverage under plans other than these will be billed directly. The \$7.50 user fee is charged for each visit. (721-8494)

#### **British Columbia Residents**

British Columbia students are encouraged to join the Medical Services Plan of B.C.

#### **Residents of Other Provinces**

Students from other Provinces are encouraged to continue their Provincial Medical coverage and are to be prepared to produce a medical insurance identification number. All Canadian provincial plans and those of the Yukon and Northwest territories are acceptable to University Health Services but may not be acceptable to private physicians' offices, physiotherapy clinics, hospital, laboratories, etc. If you have any other plan the University will bill you and you may then be reimbursed by your medical plan. Please carry your medical insurance number with you when you visit Health Services.

#### **Nonresidents of Canada**

Students who are not residents of Canada are required to purchase sickness and hospital insurance coverage through the University of Victoria as a condition of registration. The fees for insurance coverage will be assessed automatically in the first term along with tuition and other university fees. This insurance coverage is for three months. The waiting period until a non-resident is eligible for B.C. Medical Plan coverage is the balance of the month from the date of arrival plus two months. The rates for insurance coverage are as follows: (a) for all undergraduates and graduate students up to age 30: \$121.00; (b) for graduate students over age 30: \$218.00. These rates are subject to yearly change. Students who can supply evidence of comparable existing coverage may receive a waiver of this assessment. Students who wish to expand this coverage to include a spouse or other members of the family may do so upon application to the University of Victoria. The current rates for coverage for undergraduate and graduate students up to age 30 are \$241.00 for a couple, and \$273.00 for a family. For graduate students over age 30 the rates are \$434.00 for a couple, and \$520.00 for a family. Students wishing to apply for expanded coverage or refund may do so by completing appropriate forms at Health Services.



**Academic Concessions Due to Illness**

Academic concession forms are provided for:

- deferred mid-terms
- deferred final exams
- reduction of course load
- withdrawal from university

Confirmation of this information will be relayed to Records Services in the form of the pink Academic Concession form. Instructors can then contact Records for confirmation.

Notes for missed classes, late assignments, missed labs and missed quizzes are not normally provided by Health Services. These matters are handled directly by the instructors.

**Illness Involving Examinations**

Students are referred to the academic regulations governing illness at the time of examination, found on page 20.

**HOUSING AND CONFERENCE SERVICES****On Campus Accommodation**

The University offers three types of on-campus accommodation: Residence Housing, Cluster Housing, and Family Housing.

**Residence Housing** provides single and double room accommodation for 1200 students in co-educational, non-smoking residence halls. All rooms are furnished with desk, chair, desk lamp, wardrobe, bed and linen for each student.

Washrooms are centrally located on each floor. Cable television is provided in each floor lounge. Pay phone and coin-operated laundry facilities are also available.

Residence Housing is community oriented. A variety of programs are offered which encompass academic, personal, recreational, and social development.

Some areas have been designated as academic halls for those who wish a quieter and more studious atmosphere.

A board package must be taken with Residence Housing. Room and board fees for a light eater in the 1994-95 Winter Session were:

Single room + meals — \$4770      Double room + meals — \$4200

Residence Housing is most popular with first and second year students but is available to any student wanting a room and board package.

**Cluster Housing** provides accommodation for 376 students in 94 separate self-contained units. Each unit consists of four private bedrooms which lock individually. Living room, dining area, kitchen and washroom facilities are shared by the four occupants.

Each bedroom is furnished with bed, desk, chair, chest of drawers and closet. Lounge furniture, dining room table and chairs, stove, two fridges, and dishwasher are provided. Linens, dishes, cutlery, and cooking utensils are not provided. Cablevision, telephone, and mainframe computer hook-up are available. Cluster Housing is completely self-contained and no board package is required. These units are for senior and graduate students. Applicants must be 20 years of age as of December 31, 1995.

**Family Housing** provides accommodation for families in 181 self-contained units. There are 48 one-bedroom apartments, 12 two-bedroom apartments, 115 two-bedroom townhouses, and 6 three-bedroom townhouses. Some units have been designed for persons with disabilities.

All units are unfurnished. Utilities are not included. Cablevision, telephone, mainframe computer hook-up are available. These units are available to families with or without children; the tenant must be a full time student at the University.

**General Application Procedure**

Write to Housing Services to have your name placed on the mailing list for the Housing Application package. An application will be mailed to you in mid-February. The application procedure requires completion of the application form and its return with a \$20.00 non-refundable application fee. You must have a UVic student registration number before your application will be accepted.

Admission to the University does not guarantee a place in Residence, but is a necessary condition to receive an offer of accommodation. Students applying for admission to the University for the first time will be offered accommodation in the order in which the student is accepted to the University. Where a number of applicants are accepted at the same time, the order in which the application for housing was received will determine the order of assignment. Students who have previously

attended the University, or were admitted in a prior year will be offered accommodation based on a randomized, computer-generated lottery.

Every effort is made to meet stated preferences; however, limited availability may restrict what can be offered at a given time.

**Waiting List**

Because the number of applications far exceeds the available accommodation, a wait list is compiled each year. As vacancies occur, assignments are made from this ordered list. It is the responsibility of the student to inform Housing Services of any change of address.

**Payment Procedure for Residence and Cluster Housing**

Acceptance of a room offer is confirmed by payment of \$100. This payment is applied to First Term fees and is due no later than 14 days from the date the room offer was made. Refund of the \$100 shall only be made if the University subsequently denies the student admission, or the student is unable to attend for medical reasons.

The balance of fees is made in two installments. The balance of First Term fees is due by August 1, 1995. Second Term fees are due by December 1, 1995. Failure to meet an acceptance or payment deadline will result in the cancellation of the room assignment.

**Payment Procedure for Family Housing**

Acceptance of a Family Housing unit is confirmed by the signing of a Tenancy Agreement, payment of the damage deposit (equal to a half a month's rent), and providing a post dated cheque for the first month's rent.

Monthly rental payments are due on the first of each month.

Rental rates for the various types of accommodation will be confirmed when an offer of accommodation is made to you.

**Moving In**

Assigned rooms are available from Friday, September 1, 1995. The residence meal pass becomes effective immediately after check-in. Residence accommodation is available prior to September 1. Each additional night of occupancy is charged at the Conference Student rate. Students who are unable to occupy assigned accommodation by the first day of classes must notify Housing Services in writing before that date, otherwise the assignment will be cancelled.

**Cancellation of Residence Contract**

Students cancelling their accommodation contract are required to give one month's notice, to be received on or before the last day of one month to be effective on the last day of the following month.

**Summer Housing**

Residence accommodation is available throughout the summer months (May-August) for students, families and friends. Reservations are recommended for this 'bed and breakfast' service. Contact Housing Services at (604) 721-8396 for rates and further details.

**OFF CAMPUS HOUSING REGISTRY**

The Housing office maintains a registry of off campus accommodation. Types of accommodation include rooms, rooms with meals, suites, shared accommodation, houses, and apartments. Due to the rapid turnover of these accommodations, lists are not mailed out; they are available for viewing in the Housing office. Students with families may also find this registry useful. For more information, telephone (604) 721-8397.

**STUDENT EMPLOYMENT CENTRE**

The Student Employment Centre (721-8421), located in the Campus Services Building, offers assistance for students and graduates seeking part-time, casual, summer and career employment. Office hours are Monday to Friday from 8:30 am to 4:30 pm.

**Services Offered:**

- individual consultations and group sessions on resume preparation, interview skills and job search strategies
- career forums (presentations on career-related topics)
- job boards with casual and part-time positions on and off campus; career opportunities; on-campus recruitment information and deadlines; and summer job postings (final year students and recent graduates should check career postings from September on; some summer jobs are posted in the fall)



- Work Study postings in September (a program of Financial Aid)
- on-campus federally-funded summer postings
- employment postings from a number of provinces, weekly postings from UVic, UBC and SFU and career postings from major newspapers across Canada
- a Career Resource Library including employer information files
- registration in the Alumni Career Services, which includes notification of career postings
- registration in the Tutoring and Casual Job Inventory
- use of typewriters for job search purposes
- use of three computer data bases: *Sojourns* (work/study abroad programs), *Boss* (Canadian manufacturers and suppliers of service) and the Environmental Enterprise Directory
- Career Search Strategies — an alumni job search program
- student employment information is also displayed on notice boards in Elliott (study wing), MacLaurin, Clearihue (main floor, A wing), Cunningham, Cornett, Human & Social Development, the Student Union Building and the University Centre.

## SPECIAL STUDENT SERVICES

The Coordinator of Special Student Programs acts as an advisor to special student populations. International students and students with disabilities are advised to contact the Coordinator in Room B215 of the University Centre (604-721-8743) regarding issues affecting their ability to participate successfully in university life.

International students and disabled students are encouraged to contact other student services described in this program.

### International Student Services

The Coordinator is available to assist all International Students with any concerns they may encounter while attending the University of Victoria. Please make an appointment or come to the office to discuss your situation.

The International Student Handbook is mailed to all students to assist them with their transition to Canada. Students should pay particular attention to immigration regulations and health insurance procedures. The office provides ongoing support to International students during their stay. These include an orientation program for all newcomers. The office in conjunction with The Association of International and Canadian Students provides social, cultural, and informational events throughout the year.

### Services for Students with a Disability

The Coordinator is available to help any students with a disability maximize their participation in university life. Students with a disability should see the Coordinator to discuss ways in which they may best be aided, before the beginning of term.

The Coordinator's office administers a program called Students Helping Students, which may provide help on an individual students basis. The Coordinator will try to arrange the required assistance through this program.

If you think you will require special arrangements in class, or in testing situations, it is essential that you discuss your special needs and your disability with the Coordinator before registration. You should also discuss your situation with your professors at the beginning of term. The University will provide reasonable accommodation within the limits of its resources but cannot guarantee to meet all requests for support services. In order to maximize the University's capacity to provide reasonable accommodation to disabled students, requests for accommodation should be made as soon as possible after students receive confirmation of enrolment. Please be prepared to document your disability to the University if your situation will require special class or examination requirements. Students with disabilities should contact the Coordinator of Special Student Programs, in Room B215, University Centre, 604 721-8743, in order to obtain the Guidelines/Procedures for requesting accommodations.

The University maintains a limited inventory of adaptive equipment for the visual and hearing impaired students. The Disabled Student Resource Centre in the McPherson Library is equipped with several computers with speech synthesizers, a large-print monitor, an Arkenstone reading machine and a closed circuit TV. There are three portable FM systems which may be loaned to hearing-impaired students. Students with any concerns regarding access should speak to the Coordinator.

Students with a disability are encouraged to join the Association of Disabled Students, an organization that provides advice, support and advocacy to all students with a disability on campus and arranges activities and informational events throughout the year. For more information please contact the University of Victoria Students' Society, the Graduate Students' Society or the Coordinator.

The Coordinator, Special Student Programs may be reached at:

University of Victoria  
P.O. Box 3025  
Victoria, B.C.  
V8W 3P2  
Tel: 604 721-8743  
Fax: 604 721-6610

## STUDENT FINANCIAL AID SERVICES

The Financial Aid Services office, located on the second floor of the University Centre, is open during regular University hours (8:30 a.m. to 4:00 p.m.). Monday through Friday. Students wishing to discuss their financial situation are advised to arrange for an appointment by calling the office at 721-8423, well before they require assistance. A trained staff of financial advisers is available to discuss and advise prospective students about the costs of attending and the potential sources of funds to cover these costs.

Students must take into consideration tuition, books and supplies, food and accommodation, transportation, and day to day living expenses when considering attending the University of Victoria. A booklet entitled "Step-by-Step Guide to completing the Application Form" which accompanies the application form for B.C. Student Assistance Program contains a breakdown of costs allowed by the Government for the average student and is helpful in preparing a budget. The booklet, along with application forms and appendices, is available in a kit from the Student Financial Aid Services office. In addition, more specific information is available in several sections on financial aid at the back of this calendar.

If financial assistance is needed to attend, students should know that the following costs were approved by Federal and Provincial student aid agencies for the 1994-95 academic year.

### Tuition and Student Government Fees

In 1994-95, the tuition and UVSS fees for a student enrolled in 15 units were \$2415 but these fees will vary according to the course load taken and are different for students in Professional Programs and Graduate Studies. For specific course costs, consult the preceding section on fees.

### Books and Supplies:

Books and supply costs were allowed at \$123 per 3 unit course in Arts and \$154 per 3 unit course in Science during 1994-95. Students enrolled in courses such as Law, Visual Arts, Music and Theatre may face additional expenses for materials and instruments.

### Food and Accommodation:

In 1994-95, a single student living away from home (that is, living off campus) was allowed a maximum of \$4998 for food and accommodation or approximately \$624.75 per month.

Single students planning to live on campus can refer to the rate schedule listed earlier in this section under Housing and Conference Services.

Costs for married students and single parents will vary greatly according to their accommodation and the number and age of their children.

### Transportation:

Local transportation to and from classes was allowed at the rate of \$17.50 per week during 1994-95. Students commuting great distances may request additional costs if justified. Students from outside the Victoria area should include the cost of two return trips between their home and the University by the most economical means when proposing their budget for student financial aid.



### Miscellaneous and Exceptional Expenses:

Students will incur a number of day to day expenses for items such as clothing, laundry, prescription drugs, recreation and entertainment. In addition, some students will have exceptional expenses, either course related (practica, field trips, etc.) or personal (chronic medical problems, support to family, etc.) These expenses should be included in the budget estimates. Students applying for B.C. Student Assistance Program should be sure to provide documentation with respect to any exceptional expense claimed, including B.C. Medical payments. Miscellaneous expenses were allowed at the rate of \$28 per week during 1994-95.

## STUDENT AFFAIRS

The Director of Student and Ancillary Services serves as the liaison between Student Societies and the University.

### UNIVERSITY OF VICTORIA STUDENTS' SOCIETY CANADIAN FEDERATION OF STUDENTS — LOCAL 44

All undergraduate students on campus at the University of Victoria are members of the UVic Students' Society (UVSS) which functions as the recognized means of communication between the general student membership, the administration, and the community.

The affairs of the UVic Students' Society are directed by the Board of Directors (BoD) which consists of fifteen students who are democratically elected in March for one year terms. Four of the directors work on a full-time basis, they are: the Director of Services, Director of Academics, Director of Finance and the Chairperson. Issues affecting student life, such as housing, overcrowding, tuition fees, accessibility, employment and postsecondary funding are researched and acted upon by the Board of Directors of the UVSS. The Board of Directors meets weekly during the Winter and Spring session and biweekly during the summer session. Meetings are held in the SUB upper lounge. Directors on the BoD are always available to help students get involved and are eager to voice the concerns of students to every tier of government. The Student's Society operates the Student Union Building (SUB), and the wide range of services and programs found within. Operations include Cinecenta Films, Health Food Bar, SUB Cafeteria, Felicita's Pub, the Campus Used Bookstore (CUB), Zap Copy shop, a Typing service, Student Bus Pass sales and the Students' Society Resource Centre. As well, from year to year the Students' Society runs a Health Plan. Students should check with Accounting Services to see whether they will be assessed a Health Plan Fee. The Health Plan Administrator can also be found in the SUB General Office. The office of the Ombudsperson is located in the SUB as well as the Women's Centre, the Martlet newspaper, CFUV Radio, and Vancouver Island Public Interest Research Group. Through their Students' Society, students sponsor and participate in clubs, course unions, and publications such as the UVSS handbook. Dances, concerts, speakers and seminars are regular activities which take place in the SUB.

UVSS members are also members of the Canadian Federation of Students (CFS), the national student voice representing more than 400,000 students at over 70 universities, colleges and technical institutes across the country. The CFS lobbies on behalf of students at the local, provincial and national levels of government.

Thus, being an active member of the UVSS is one of the most important ways of contributing to the future. By participating in the decision making process—whether it be by voting in elections, attending Annual or Semi Annual General meetings or by running for a position on the Board of Directors, Senate, or Board of Governors; students are working to ensure a better managed Students' Society and a better University environment.

To contact the Resource Centre call 721-8366 or Chairperson at 721-8370.

For further details on costs allowed, please read the guide accompanying the B.C. Student Assistance Program carefully.

### CAREER INFORMATION VOCATIONAL COUNSELLING

Career information and vocational counselling may be obtained from the Counselling Services or the Student Employment Centre which operates a Career Resource Library. Students may also wish to contact faculty advisers in their areas of study for advice pertinent to career planning.

### Office of the Ombudsperson, UVSS:

Operating out of Room 133 of the Student Union Building, the Ombudsperson functions as an independent, impartial investigator equipped to field student complaints about any department or office on campus.

While the office is not empowered to enforce its recommendations, it does seek to ensure that on-campus decisions and policy are open, and consistent with rules of administrative fairness and natural justice.

The Ombuds office also serves as an information and referral centre to other campus operations and services. The office of the Ombudsperson is wholly funded by the University of Victoria Students' Society.

Usual office hours are Monday all day, and Tues., Wed., & Thursday until noon. Hours do vary occasionally, so it's wise to phone ahead. Please call Kathleen Beattie at 721-8357.

### Women's Centre

The Women's Centre is a drop-in centre for any woman on campus. The centre is run by a collective of women students who are volunteers, paid work studies and a paid resource co-ordinator. The centre is a place where women can receive support, advocacy, or just come to eat lunch and get to know other women on campus. Women are encouraged to involve themselves in their areas of interest or expertise to help create a better campus environment for all women. The centre maintains a resource library, publishes the oldest feminist student newspaper in Canada, *The Emily*, offers workshops in self-defense and has many committees to get involved with such as The Date Rape and Dating Violence, Education Project, The December 6th Memorial Committee and International Women's Week committees. *The Emily* always needs volunteer women staff. Weekly collective meeting times are posted, and meetings are held throughout the year. The Women's Centre is located in room 146 of the Student Union Building and all women are welcome.

### CFUV Radio

CFUV is UVic's campus/community radio station located in the SUB. Programming is directed toward those throughout the Victoria area who feel frustrated by commercial radio. CFUV programming ranges from rock, folk, jazz and classical to spoken word, and public affairs. For financing CFUV relies on support from an annual Fundrive, on-air sponsorships, grants, special fundraising projects and the UVSS. The station is run by a few staff members and a large body of volunteers, comprised of both UVic students and community members. If you are interested in volunteering come to the station during office hours (Monday through Saturday 9 am-5 pm) or phone 721-8702. Previous experience is not necessary.

### The Martlet

Literally, a martlet is a small, footless, mythical bird. It is also UVic's student newspaper and 10,000 copies appear every Thursday in boxes all over campus.

*The Martlet* is written by YOU! the students of UVic, about other students, for other students to read. Editorially and financially independent, it addresses problems and uncovers issues often ignored by the mainstream press.



Anyone who wants to volunteer to write a story, take some photos or jump in and help with the messy stuff can drop by SUB 108 and talk to the co-editors Dave and Cam or call 721-8360.

### VIPIRG (Vancouver Island Public Interest Research Group)

VIPIRG is an autonomous, non-profit, non-partisan organization dedicated to research and action in the public interest. In undertaking these activities, we strive to provide and promote a tolerant and safe environment. (s. 15. of the Canadian Charter of Rights and Freedoms).

VIPIRG is an opportunity for students and community members. By becoming an active member, you will give yourself an opportunity to learn new and innovative research skills, learn community activism, apply academics to current issues and problems, work with volunteers and professional staff to effect positive environmental and social change and meet new friends.

Through consensus, VIPIRG members provide direction for the numerous committees that deal with social justice and environmental issues such as: Anti Racism & Discrimination, Media Watch, Politics of Body Image, Native Vegetation, SLAPP, Creating Empowered Communities, etc. For more information, please contact us at 721-8629 or visit the office in Rm. 144 in the Student Union Building.

### GRADUATE STUDENTS' SOCIETY

The Graduate Students' Society was officially recognized by the Senate of the University of Victoria in the fall of 1966, shortly after the establishment of graduate studies. Through the Executive Council of the Society, it represents the graduate students to the University and the community.

The five members of the Executive of the Society are elected for one year terms by the members of the Society. Executive members may be elected in October or April. Any graduate student registered at the University of Victoria, whether part time or full time, is eligible (a) to vote in Society elections; (b) to hold office in the Executive Council; (c) to represent the Society on University and Senate committees, and (d) to be elected by the graduate students in their department to act as a liaison between the Executive Council and the graduate students in that department.

The Functions of this Society are: (a) to represent the graduate student body in all matters pertaining to the welfare of it as a unit or any of the individuals comprising that body, (b) to represent the academic, teaching and research assistants in communication with the faculty and administration, (c) to act as a liaison between the graduate student body and the faculty and administration, (d) to promote intellectual, social and recreational activities among graduate students, and (e) to provide a communication link with other student societies and organisations.

The Society is funded by fees collected at registration by the University for the Society. These funds are used to pay the costs of preparing Library/G.S.S. identification cards for graduate students as well as to support the regular functions of the Society and the building reserve fund.

Graduate students with ideas, projects or problems are urged to contact any member of the Executive for assistance. Executive members may be contacted at the G.S.S. office (Room 102 — Grad Centre).

The Graduate Students' Society in collaboration with the Faculty of

Graduate Studies administers a fund to assist graduate students wishing to attend professional meetings and conferences. For information, contact the Faculty of Graduate Studies at 721-7970.

G.S.S. office phone no.: 721-8816

### GENERAL CONDUCT

The University authorities do not assume responsibilities which naturally rest with parents. This being so, it is policy to rely on the good sense of students for the preservation of good moral standards and for appropriate modes of behaviour and dress.

### HAZING

The University prohibits hazing.

The attention of students is called to this resolution of the Alma Mater Society (U.V.S.S.):

*The Student's Council shares the concern of the University over hazing during Frosh Week. We wish to point out that any form of hazing is forbidden by University regulation. With the advent of residences and the ensuing growth of the University, this form of conduct has become archaic and will no longer be tolerated. Any behaviour which exceeds the bounds of good taste and common sense will result in disciplinary action by the Student's Council.*

### CANADIAN FORCES UNIVERSITY TRAINING PLANS

The Canadian Forces provide unique opportunities for young Canadians to obtain a baccalaureate degree while training for the varied and rewarding career of a Military Officer.

The Regular Officer Training Plan (ROTP) is a fully subsidized plan of up to five years of university leading to undergraduate degrees in Engineering, Sciences, Arts or Administration. Specialist degrees in Physiotherapy, Pharmacy and Nursing are also subsidized. Medicine and Dentistry are subsidized under separate plans called MOTP and DOTP respectively. Because of full subsidization this plan includes an obligation to serve in the Canadian Forces as an officer for a fixed period after graduation.

The Reserve Entry Training Plan (RETP) is similar but applicants attend Canadian Forces Military Colleges paying their own tuition. Current rates for tuition are approximately \$5000 a year, but students are offered summer employment with the military to assist them in meeting tuition fees. RETP graduates have an obligation to serve five years on a part time basis with the Canadian Forces Primary Reserve if there is a unit available in their geographical area.

For more information contact:

ROTP OFFICER  
CANADIAN FORCES RECRUITING CENTRE DETACHMENT  
721 Johnson Street  
Victoria, B.C. V8W 1M8  
Tel. (604) 363-3717

## ALUMNI ASSOCIATION

The Alumni Association is an organization composed primarily of University of Victoria graduates. It seeks to support the University and to represent the views of graduates within the University community. In addition to graduates, automatic members of the Association by virtue of their being on the Convocation Roll include: the Chancellor, the President and Vice-Chancellor of the University, members of the Board of Governors and the Senate, all Faculty members, some members of Victoria College as well as others on the roll, such as emeritus Faculty, some University employees and members of the community.

The Association is governed by a Board of Directors elected and appointed annually.

Programs for alumni are implemented jointly with the Development & Alumni Relations Office. Alumni programs include the sponsorship of scholarships, bursaries and an award for excellence in teaching, as well as reunions, social activities, a travel program and other enterprises.

The Association membership is informed of activities through mailings and through the University of Victoria alumni magazine, 'the Torch.'

The Alumni Association can be contacted through the Alumni Relations Office on campus. Telephone number: 721-7635.

President 1994-95: Anne McLaughlin



## UNIVERSITY PUBLICATIONS

Besides this Calendar and the publications mentioned on the inside front cover, the following are designated as authorized University publications:

### *Malahat Review*

An international quarterly of life and letters edited by Derk Wynand, B.A., M.A. Subscription: \$15.00 for one year; \$40.00 for three years (overseas, \$20.00 and \$50.00, respectively).

### *The Ring*

A news tabloid published biweekly Sept.-April and periodically May-August by Public Relations and Information Services. Circulated on campus free of charge.

### *The Torch*

A magazine for University of Victoria alumni published three times a year by Public Relations and Information Services and mailed to alumni free of charge.

## DIVISION OF CONTINUING STUDIES

To ensure access to the academic resources of the University of Victoria by a broad and diverse community of adult learners, the Division of Continuing Studies provides a full complement of continuing education programs. These are:

**Credit Courses and Programs Offered Off Campus and Evening Credit Courses Offered On Campus by the Faculties of Arts and Science, Education and Human and Social Development, and Courses Offered through the Division of Continuing Studies in the Summer Studies Period.**

Credit courses offered off campus are listed in the Distance Learning and Immersion Course Guide for Off-Campus Students (refer section below on "Distance Education"). The Summer Studies Calendar, listing courses to be offered on and off campus in the Summer Studies period, will be issued in late February. Information about on campus evening courses and off campus courses starting in September will be available in June. Contact Records Services at the University for a copy of the Telephone Registration Guide and Timetable.

Academic rules and regulations published in this Calendar, except as described in any Program Supplement to the Calendar, apply to students taking courses under this section.

The University reserves the right to cancel courses when enrollment is not sufficient and to establish special regulations for admission to nondegree programs or courses.

Selection of courses must be made in keeping with Calendar prescriptions for the degree program involved. Students seeking academic advice regarding degree programs should consult the appropriate academic advising centre. Inquiries should be directed to one of the following:

Advising Centre—Faculty of Arts and Science, Room A117, Clearview Building. Telephone: 721-7567.

Advising Centre—Faculty of Education, Room 250, MacLaurin Building. Telephone: 721-7877.

Students in the Faculty of Fine Arts or the Faculty of Human and Social Development should contact the specific department or school.

Regulations governing application and registration procedures and fees are detailed in the appropriate Supplement.

Late afternoon and evening courses, which would be of particular appeal to part time students, are located in the University of Victoria Telephone Registration Guide and Timetable, which is available from Records Services. The late afternoon and evening credit courses are identified with a double asterisk (\*\*).

Summer Studies course information: see below.

### **Professional Development Programs:**

These programs are planned to meet the specific continuing education needs of persons working in the professions. Courses and workshops

are offered throughout the Province in cooperation with regional colleges and professional organizations. Programs for professionals leading to certificates or diplomas are offered in the following areas: Adult and Continuing Education, Business Administration, Computer Based Information Systems, Cultural Resource Management, Fine Arts, French Language, Humanities, Public Sector Management, Technology and Management.

For information: 721-8451.

### **Distance Education:**

In collaboration with various faculties, Continuing Studies offers credit courses, professional development and community education programs which permit students throughout the province to study on a part time basis. Programs use a variety of instructional delivery methods including Knowledge Network television broadcasts, video tapes, audio cassettes, computer assisted instruction, audio conferencing, print and face to face instruction. Regular telephone contact with the instructor is an important component of all distance education courses. The University of Victoria's distance education offerings are listed in the Distance Learning and Immersion Course Guide for Off Campus Students.

For information: 721-8451.

### **Community Education Programs:**

The non-degree program uses a variety of educational formats, such as courses, lecture series, workshops, conferences, residential seminars, travel study, and symposia. The curriculum is developed in cooperation with departments from all faculties of the University.

Areas include: Programs for Women; Seniors; Arts and Science; Education; Business and Management; Learning and Life Skills; Travel Study; Adult Education; Fine Arts; Health Sciences; Languages. Additional courses are developed as needs arise and academic resources permit. Educational packages consisting of print materials, audio and videotapes, are developed for self-directed learning. Also, a number of programs under SAGE (Stimulate, Advance and Guide Education) focus on peer learning and peer teaching and use study groups as a format for delivery.

For information: 721-8451.

### **Conference Management:**

Conference Management offers a conference planning and management service to assist University and other groups and organizations with the preparation, management and evaluation of meetings, seminars and conferences, both on and off campus.

For information: 721-8470.

For further information on any of the above programs please call or write the Division of Continuing Studies, University of Victoria, P.O. Box 3030 MS 8451, Victoria, B.C. V8W 3N6. Telephone 721-8451.

## SUMMER STUDIES

Credit courses offered in the Summer Studies Period (May-August) are listed in the Summer Studies Calendar issued in late February. Courses offered at the Bamfield Marine Station, as well as Summer travel study programs, are also listed in the Summer Studies Calendar.

Academic rules and regulations published in the main University Calendar, except as described in any Program Supplement to the Cal-

endar, apply to students taking courses in the Summer Studies period.

The University reserves the right to cancel courses when enrolment is not sufficient.

For information: Administrative Clerk, Summer Studies, Room A273 University Centre: 604-721-8471; fax 604-721-8774; e-mail: LMorgan@UVVM.UVic.ca



## PREPROFESSIONAL EDUCATION

The material which follows is only a *guide* to professional education at other institutions, and students must not assume that completion of these courses will grant them automatic admission. Students who are seeking advice about professional education should consult the Arts and Science Advising Centre, University of Victoria, where specific information on prerequisites may be obtained. Students who plan to undertake professional studies at other Canadian or American institutions are urged to correspond with the institutions of their choice prior to their first year at the University of Victoria.

**Please note that course programs for First Year students only are outlined, although it may be possible to complete one or more additional years of study at the University of Victoria.**

### AGRICULTURE

Suggested courses:  
Biology  
Chemistry  
English  
Mathematics  
Physics or Economics

### APPLIED SCIENCE

Suggested courses:  
Chemistry  
English  
Mathematics  
Physics  
Elective

### COMMERCE AND BUSINESS ADMINISTRATION

Suggested courses: First Year Arts and Science or its equivalent with standing in 15 units (including Economics, English, Mathematics and Computer Science).

### DENTISTRY

Completion of at least three years of study on a degree program in Arts and Science including Biology, Chemistry, English, Mathematics, Physics, Biochemistry.

### ARCHITECTURE

Suggested courses:  
Art  
English  
History in Art  
Mathematics  
Physics  
Social Sciences

### CHIROPRACTIC

Suggested courses:  
Completion of two years in Arts and Science, the first year of which to include the following:  
Biology  
Chemistry  
Mathematics  
Physics  
Psychology

### FORESTRY

Suggested courses:  
Biology  
Chemistry  
English  
Mathematics  
Physics

### MEDICINE

Completion of at least three years of study on a degree program in Arts and Science including:  
Biology  
Chemistry  
English  
Mathematics  
Physics  
Biochemistry

### PHARMACY

Suggested courses:  
Biology  
Chemistry  
English  
Mathematics  
Physics

### SPEECH AND HEARING SCIENCE

Students intending to pursue studies in the Speech and Hearing Sciences after graduation are advised to consult the Department of Linguistics about the Bachelor of Science in Linguistics, which offers suitable preparation for this area of study.

### VETERINARY MEDICINE

Completion of two years in Arts and Science including:  
Biology, including Genetics  
Chemistry, including Organic Chemistry  
English  
Mathematics  
Physics  
Biochemistry  
Microbiology  
Electives: a course in Statistics is recommended.

### FAMILY AND NUTRITIONAL SCIENCES

Suggested courses:  
Biology  
Chemistry  
English  
Mathematics (Hum. Nutri., Dietetics)  
Physics (Human Nutrition)  
Social Science (Family Sciences, Home Economics)

### OPTOMETRY

Completion of two years in Arts and Science, the first year of which to include the following:  
Biology  
Chemistry  
Mathematics  
Physics  
Psychology

### REHABILITATION MEDICINE

Suggested courses:  
Biology  
Chemistry  
English  
Mathematics  
Psychology

## RESEARCH ADMINISTRATION

Alexander McAuley, B.Sc., Ph.D., D.Sc. (Glas.), C.Chem., M.R.S.Chem., F.C.I.C., Associate Vice President, Research  
Michael E. Corcoran, B.A. (Northw.), M.A., Ph.D. (McG.), Associate Dean, Research  
Fred H. Bennett, B.Com. (Alta.), M.B.A. (Brit. Col.), Research Administration Officer  
Ralph B. Scheurle, B.Sc. (U. of Vic.), Senior Scientific Assistant

The Office of Research Administration is the primary location for information to researchers across the University about sources of funding for research. The Office also oversees the administration of research grants and contracts. Applications and proposals for research and contractual work are monitored to ensure that proper ethical and other procedures are followed. Such monitoring activities within the Office are achieved through the Animal Care Committee, the Biosafety Committee, and the Committee on Research and Other Activities Involving Human Subjects. Information regarding internal travel grants, research support, and research computing are available to eligible faculty mem-

bers and are administered through the President's Committee on Faculty Research and Travel.

In addition, the Associate Vice President Research supervises the activities of various centres for research on campus, including those identified below.

### CENTRE ON AGING

Neena L. Chappell, B.A. (Car.), M.A., Ph.D. (McM.) (Professor, Sociology), Director  
Barbara Clough, B.Sc. (McG.), Dip.Ed. (W. Ont.), M.A. (Brit. Col.), Executive Assistant  
Gina Martone, B.A. (W.Ont.), M.A. (Man.), Research Coordinator

The Centre on Aging is a multidisciplinary research centre established to advance knowledge in the fields of aging through excellence in research. Dialogue with community partners and distribution of information are emphasized. The Centre promotes and conducts applied and basic research in the social and behavioral sciences, health care and



social service areas of aging. Some examples of research the Centre promotes include: needs assessments and social surveys, experimental research, program evaluations, development of clinical diagnostic tools and social policy research. The Centre is financially supported through contributions from the University, granting councils, contract work and donations from individuals, foundations and business.

Research conducted by the Centre on Aging is undertaken in collaboration with the community, government and with academics across a wide variety of disciplines. Centre researchers are drawn from many Faculties, Departments and Schools including Anthropology, Child and Youth Care, Communications and Social Foundations, Geography, Human and Social Development, Health and Information Science, Law, Nursing, Physical Education, Psychological Foundations in Education, Psychology, Social Work and Sociology. Knowledge generated through research is distributed through academic publications, seminars and conferences, and through Centre publications.

For further information contact the Centre at 721-6369.

### **CENTRE FOR ADVANCED MATERIALS AND RELATED TECHNOLOGY (CAMTEC)**

Sadik Dost, Dip.Eng. (Karadeniz Tech. U.), Ph.D. (Istanbul Tech. U.), P.Eng., F.C.S.M.E., Director

The Centre for Advanced Materials and Related Technology (CAMTEC) at the University of Victoria is a research centre committed to interdisciplinary work on advanced materials and technology. The scope of this work covers a wide spectrum of research in theoretical and applied areas. With this in mind CAMTEC coordinates related research among the Departments of Chemistry, Electrical and Computer Engineering, Mechanical Engineering, and Physics. CAMTEC members work in close association with scientists and engineers from the private and public sectors to ensure technology transfer to industry.

The centre's key research areas and areas of application include: crystal growth of semiconductors, dielectric materials characterization, magnetic and superconductive materials and their applications to magnetic refrigeration, microwave and optical applications of advanced materials, advanced composites, alloys, and ceramics, integrated circuit technology, infrared detectors, microprocessors for environmental and medical applications, opto-electronic and micro-electronic sensors, and piezoelectric actuators, and chemical sensors.

The centre stimulates the development of new equipment and facilities on campus and also attracts graduate students and visiting scientists interested in advanced materials. As an interdisciplinary centre CAMTEC has an impressive array of equipment and facilities at its disposal. The knowledge and experience gained from the research into advanced materials at CAMTEC is disseminated throughout the University, to the private and public sectors, and to other Canadian universities and institutions. The Centre accomplishes this through scientific publications, conferences, workshops, and seminars, as well as through courses offered by the members. Technology transfer is facilitated through collaborations between the Centre and the public and private sectors.

### **CENTRE FOR ASIA PACIFIC INITIATIVES (CAPI)**

William A.W. Neilson, B.Com. (Tor.), LL.B. (Brit. Col.), LL.M. (Harv.), Director

Ralph W. Huenemann, B.A. (Oberlin), M.A., Ph.D. (Harv.), Chair, Economic Relations with China

Douglas M. Johnston, M.A., LL.B. (St. And.), M.C.L. (McG.), LL.M., J.S.D. (Yale), Chair in Asia Pacific Legal Relations

William V. Rapp, B.A. (Amherst), M.A., Ph.D. (Yale), M.A. (Stanford), Chair, Economic Relations with Japan

Sandra Schatzky, B.A. (York), Executive Assistant

The purpose of the Centre is to encourage, conduct and support the University of Victoria's Asia Pacific public policy research and related initiatives, and to encourage the development of the University's Asia Pacific programs and resources. The Centre includes the Director and three Chairs, who focus on Law and Economic Development, Economic Relations with China, Asia Pacific Legal Relations, and Economic Relations with Japan. Associates who share research interests are attached to the Centre. Linkages are established with other centres on campus for purposes of collaborative research, as well as with individuals and

institutions across Canada and in the Asia Pacific. In addition to the research activities undertaken by CAPI, a wider role is taken on campus in disseminating information through conferences, workshops, symposiums and publications. The Centre is not a teaching unit, and the faculty associated with the Centre teach through their respective departments.

### **CENTRE FOR EARTH AND OCEAN RESEARCH**

Christopher R. Barnes, B.Sc. (Birm.), Ph.D. (Ott.), F.R.S.C., Director

The objective of the Centre for Earth and Ocean Research (CEOR) is to promote, initiate and coordinate research in earth, ocean and atmospheric sciences at the University of Victoria. The Centre is a cooperative venture between the University and several government agencies sited in Greater Victoria: Institute of Ocean Sciences (Fisheries and Oceans, Canada); Pacific Geoscience Centre (Natural Resources Canada); Atmospheric Environment Service (Environment Canada); Defence Research Establishment Atlantic (West Coast), Royal Roads Military College (National Defence, Canada); and the B.C. Geological Survey (Energy, Mines and Petroleum Resources, British Columbia).

Research topics which can be pursued under the auspices of this Centre include: geophysics and geology, both terrestrial and marine; physical, chemical, geological and biological oceanography; and underwater acoustics, atmospheric modelling and climate change.

Cooperating University Departments are: Earth and Ocean Sciences, Physics and Astronomy, Geography, Chemistry, Biology, Electrical and Computer Engineering, and Mechanical Engineering. Graduate students wishing to take part in the work of the Centre register with an appropriate University Department, but may conduct a large part of their thesis research working with personnel and equipment of a cooperating agency. Personnel from the agencies participate in giving appropriate course work. Both Master's and Doctoral work can be conducted through the Centre.

### **CENTRE FOR FOREST BIOLOGY**

John N. Owens, B.S. (Portland St.), M.Sc., Ph.D. (Ore.St.), F.R.S.C., Department of Biology, Director

The purpose of the Centre is to carry out fundamental and applied research and to train graduate students and postdoctoral fellows in Forest Biology, emphasizing Forest Regeneration and Biotechnology. The faculty members collaborate and work in close association with scientists from Forestry Canada at Pacific Forestry Centre (PFC) and B.C. Ministry of Forests (MOF) Research Branch. Close association with the forest industry and forest industry laboratories is maintained in order to ensure maximum technology transfer. The knowledge generated is disseminated through scientific publications, conferences, lectures and through the diverse academic courses offered by the Centre.

Research topics which can be pursued under the auspices of this Centre include: conifer reproductive biology, seedling physiology, stress physiology, water relations, plant molecular biology and tissue culture.

Cooperating University Departments are: Biology and Biochemistry and Microbiology. Graduate students wishing to take part in the work of the Centre register with an appropriate University Department, but may conduct a large part of their thesis research working with personnel and equipment of a cooperating agency. Personnel from the agencies participate in giving appropriate course work. Both Master's and Doctoral work can be conducted through the Centre.

### **CENTRE FOR STUDIES IN RELIGION AND SOCIETY**

Harold G. Coward, B.A., B.D., M.A. (Alta.), Ph.D. (McM.), F.R.S.C., Director

The Centre for Studies in Religion and Society was established at the University of Victoria in 1991 to foster the scholarly study of religion in relation to the sciences, ethics, social and economic development and other aspects of culture. The primary aim is to promote dialogue between religion and these other aspects of human experience. The Centre has a fundamental commitment to pluralism and will pursue a broad range of research interests not limited to any specific time, place, religion or culture. It embodies the understanding that religious traditions have been formative of human reality and experience, and that they are the proper object of creative, rigorous inquiry, whether from a



disciplinary or an interdisciplinary perspective.

The Centre encourages participation from scientists, social scientists, humanists and academics in professional schools; addresses some of the major questions facing society by bringing together academics from a variety of disciplines; seeks to bridge the gap between university and community by the kinds of problems it selects for study and by promoting dialogue between academics and the lay public.

The Centre will pursue these objectives through research fellowships, interdisciplinary research, lectures, seminars, conferences, publications, library acquisitions and other appropriate academic activities. Suggestions for future projects are welcomed.

For further information contact the Director at 721-6325.

## CENTRE FOR SUSTAINABLE REGIONAL DEVELOPMENT

Stephen C. Lonergan, B.Sc. (Duke), M.A., Ph.D. (Penn.), Department of Geography, Director

The Centre for Sustainable Regional Development (CSR/D) at the University of Victoria is a research centre supporting interdisciplinary work on environmental, economic, institutional, social and cultural sustainability. It provides information on sustainable development and its applications to users in the region, in the nation and internationally.

The Centre includes researchers from the three divisions of the Faculty of Arts and Science as well as the Faculties of Law and Engineering. It offers expertise on environment/development issues to governments, research institutions and the private sector. It maintains close ties with provincial and federal government ministries, and university, provincial and national institutes concerned with sustainable development in order to provide coordinated research programs and efficient and contemporary information management. The Centre is supported through direct contributions from the University, research funding and contract work.

The basic goals of the Centre are to provide an institutional focus for carrying out research, training and community service activities on sustainable regional development regionally, nationally and internationally, and to make the resources of the Centre available to communities and federal and provincial government ministries interested in sustainable development studies.

## INSTITUTE FOR DISPUTE RESOLUTION

Andrew J. Pirie, B.A. (Wat.), LL.B. (Dal.), LL.M. (Well.), Faculty of Law, Executive Director

The Institute for Dispute Resolution is a multidisciplinary centre at the University of Victoria focused on dispute resolution research, education, professional training and community development. The Institute also acts as a resource service, not only for UVic students and faculty, but for government departments, non-governmental organizations, community groups, professionals and others interested in working in or improving dispute resolution processes or in applying alternative dispute resolution (ADR) techniques to their practical problems.

The Institute works collaboratively with a range of Faculties and departments at the University of Victoria as well as maintaining strong links to the dispute resolution community external to the University.

The Institute's diverse research program has examined disputes in both public and private settings, including those involving land use and development, the environment, the school system, the family, and the community. The Institute also is researching issues relating to the resolution of complex, multi-party public policy disputes, disputes involving First Nations, the institutionalization of ADR procedures, the relationship between culture and conflict, and the nature of power in dispute resolution. The Institute also plans to develop a university level program in dispute resolution theory and practice for both public and private sector personnel involved in this area.

The work of the Institute is guided by a Board of Directors drawn from a range of disciplines and by a National Advisory Council. The Institute receives support from the University, external research funding and contract work.

## LABORATORY FOR AUTOMATION, COMMUNICATION AND INFORMATION SYSTEMS (LACIR)

R. Nigel Norspool, B.A. (Cantab.), M.Sc., Ph.D. (Tor.), Director

Founded at the University of Victoria in 1987, LACIR exists to promote research in information, communication and automation systems.

LACIR is an on-campus, cross-disciplinary research centre. University members include over 80 faculty and staff engaged in communication and information research, and represent the diverse fields of chemistry, computer science, engineering, geography, health informatics, linguistics, music, philosophy, physics and psychology. Specific research areas include software systems and software engineering, artificial intelligence, VLSI, robotic controls, signal processing, CAD/CAM, speech synthesis, energy systems modelling, and expert systems.

LACIR encourages collaborative research among its members, and with industry, government and other B.C. universities. Research results and new technology can be transferred to industry for commercial development. LACIR also promotes education in advanced systems.

LACIR works with the British Columbia Advanced Systems Institute (ASI), is a member of the Software Productivity Centre, and participates in meetings of the Vancouver Island Advanced Technology Centre. VIATeC monitors the needs and supports the development of local high tech industries, distributes information, and provides networking opportunities.

## INSTITUTE FOR INTEGRATED ENERGY SYSTEMS (IESVIC)

David Scott, B.Sc., M.Sc. (Queen's), Ph.D. (Northw.), P.Eng., Director

IESVic was established in 1989 by Dr. David S. Scott, in the Department of Mechanical Engineering, and became an independent University Centre in January 1994.

IESVic is engaged in the development of energy systems that *simultaneously*

- Offer a foundation for economic growth and industrial diversification (*create wealth*)
- Cause minimal environmental intrusion, and especially, reduce climate destabilizing emissions (*clean the place up*)
- Provide flexibility and resilience in response to technical, geopolitical and environmental change (*win in all possible futures*)

IESVic consists of three research groups: Systems Analysis, Cryofuel Systems and Electrochemical Systems. The Cryofuel Systems Group is led by Dr. John Barclay and their current program goal is to develop low cost and efficient fleet-size refuelling systems for liquid natural gas vehicles. To this end, work focuses on liquefaction technologies, specifically magnetic liquefaction. This technique employs the temperature change of magnetic materials caused by the application and removal of magnetic fields to execute efficient refrigeration cycles. This project requires the integration of physics, material science, economics and especially mechanical engineering. Cryofuel Systems has working relationships with many other groups, including University of Quebec at Trois Rivières and AMES Lab at Iowa State University.

The Systems Analysis Group, led by Dr. H-Holger Rogner, acts as a radar, sensing patterns in technology and culture for business opportunities in the energy system. This team engages itself in energy system modeling at national, regional or local levels. This modelling encompasses emissions, environmental damage costs, technology and innovation evolution, economic development and growth, and social and political factors. At a more detailed level, techno-economic life-cycle methodologies are used to evaluate energy subsystems such as fuel cell power trains for various vehicles. Systems Analysis also identifies opportunities for technology optimization and development, and supports hardware development programs such as Cryofuel Systems and Electrochemical Systems. This Group primarily employs economic, thermodynamic (first and second law) and engineering analysis techniques. Systems Analysis has working relationships with many other groups, including the International Institute for Applied Systems Analysis, and inputs to the Intergovernmental Panel on Climate Change.

IESVic gave birth to the Electrochemical Systems Group during the 94/95 academic year. This group is composed of a number of faculty members in Mechanical Engineering, working together to develop a next-generation fuel cell for transportation applications. IESVic expects



fuel cells will be a key attractor technology in energy system evolution. Electrochemical Systems product development work will focus on engineering fuel cell systems, and will be synergistic with the work in Cryofuel Systems. The primary disciplines involved are material sci-

ence, heat and mass transport, manufacturing processes and design. Ballard Power Systems and Simon Fraser University in Vancouver complement the program with electrocatalyst and electrolyte development.

## AFFILIATED CENTRES

### HUMANITIES CENTRE

The objective of the Humanities Centre is to provide a forum where scholars from all branches of the Humanities can work cooperatively, especially on projects that transcend the boundaries of established disciplines and institutions. The activities of the Centre are intended to supplement teaching and research within traditional departments and to encourage work that departs from established assumptions and requires assistance unavailable within existing institutional frameworks.

From time to time as a part of its program, the Centre will offer courses for undergraduate students in interdisciplinary issues within the Humanities.

For further information contact the Dean of Humanities.

### COURSES

#### HUMC 333 (1½ or 3) INTERDISCIPLINARY STUDIES IN HUMANITIES

A variable-content course offered by the Humanities Centre in conjunction with two or more departments. Normally team-taught. Available for elective credit in all programs in Arts & Science. May be credited toward a General, Major or Honours program for an individual student only with written permission from the department concerned. NO(3-0)

## COOPERATIVE EDUCATION PROGRAMS

### THE "COOPERATIVE" CONCEPT

Cooperative Education can be described as a process of education which formally integrates the students' academic and career studies on campus with relevant and productive work experience in industry, business, and government.

The accumulation of up to two years of varied and program related work experience enhances the students' intellectual, professional, and personal development, by providing opportunities for applying academic theories and knowledge, evaluating and adjusting career directions, and developing confidence and skills in working with people.

### COOPERATIVE EDUCATION PROGRAMS OFFERED

Cooperative Education Programs are currently offered in the Faculty of Arts and Science (Biology, Biochemistry and Microbiology, Chemistry, Computer Science, Economics, Geography, Mathematics, Physics), the Faculty of Business, the Faculty of Education: (School of Physical Education: Leisure Service Administration, Kinesiology), the Faculty of Engineering (Computer Engineering, Computer Science, Electrical Engineering, Mechanical Engineering), the Faculty of Fine Arts (Writing), the Faculty of Human and Social Development (Health Information Science), the Faculty of Graduate Studies (Coaching Studies, Economics, Business Administration, Public Administration, Sociology, and other graduate areas on an individually negotiated basis) and the Faculty of Law. An Arts Cooperative Education Program is available to students in the Humanities and Fine Arts programs. See entries under Faculty of Arts and Science and Faculty of Fine Arts.

### ADMISSION

Admission and graduation requirements for Cooperative Education Programs are determined by the individual departments. Consult the calendar entries in these areas for further information.

Students must apply to the appropriate department for admission to the Coop Program. In general, Coop students are required to achieve an above-average academic standing, and to demonstrate the motivation and potential to pursue a professional career.

### WORK TERMS

As an integral component of Cooperative Education Programs, students are employed for a number of work terms, which are arranged and evaluated by the individual departments.

Work terms, normally of four months duration (13 weeks minimum), begin in January, May, and September. Work terms generally alternate with full time academic terms on campus, and provide productive and

paid, full time work experience which is related to the student's program of studies and individual interests.

### WORK TERM PREPARATION

Co-op students are expected to complete successfully a program of seminars and workshops (typically one hour per week), prior to undertaking their first work term. This program is designed to prepare students for the work term. The following topics will be covered: Co-op program objectives/expectations, job seeking skills, transferring skills to the workplace, learning objectives, job performance progress and evaluation. Students should consult with their coordinator for program schedule information. This program is a co-requisite for students participating in the placement process prior to their first work term.

### WORK TERM CREDIT BY CHALLENGE

Certain Coop Programs allow students to challenge their first work term on the basis of prior, relevant work experience. Students should discuss any potential challenge with the Coop Coordinator for their program. Not all programs permit Work Term Challenge; where it is permitted, it is subject to the following regulations.

1. A formal application to challenge a work term is required prior to undertaking the first scheduled work term.
2. Application forms for Work Term Challenge may be obtained from the Records Office, and must be submitted to the appropriate Coop Program for approval to challenge, after which the Challenge fee is assessed.
3. Work term credit by Challenge is limited to a maximum of one work term; exceptions require the approval of the Director of Cooperative Education Programs.
4. Assessment of Work Term Challenge will be carried out by the appropriate Coop Program, based on the following:
  - (a) a minimum of one year of continuous, directly relevant work experience;
  - (b) written confirmation of employment and evaluation of performance from the employer;
  - (c) comprehensive outline by the student of the prior work experience, providing evidence that the student has acquired appropriate professional and personal knowledge and skills;
  - (d) A work report appropriate to the discipline.
5. Once the assessment has been administered, the result will be entered on the student's academic record.



## GENERAL REGULATIONS

- Students must register for each work term by completing the Work Term Registration form, which is provided by the Coop Coordinator and which is normally completed when the student accepts an offer of employment for the work term and must be completed prior to start date. Students must be registered for the entire duration of the work term employment and, once registered, are not permitted to withdraw from the work term without penalty of failure, unless specific written permission has been granted by the department/Director. Students must contact the appropriate Coordinator for recommendation on procedure.
- Undergraduate students must successfully complete the University English Requirement prior to undertaking their first work term; this does not apply to students enrolled in the Faculty of Law.
- Each work term is evaluated on the basis of the student's performance of assigned work term tasks and a written work term report. The work term period and evaluation (grading: COM, F, or N) are recorded on the student's official academic record. A failing grade (F or N) will be assigned if a student fails to complete satisfactorily the requirements for the work term; the requirements include satisfactory performance on the work term and the submission of a satisfactory work term report by the deadline specified by the individual department.
- A failed work term will normally result in the student being required to withdraw from the Coop Program, subject to review by the department.
- A Coop Program fee, which is nonrefundable, is due in the first month of each work term and is subject to the Fees regulations (page 23).
- In the undergraduate programs, students are required to complete satisfactorily the number of work terms specified by the academic program, normally at least four work terms are required and in no case will there be less than three. After admission to the program, students are required to register for all scheduled work terms, except for the work term offered by some programs in the summer at the end of first year.
- Work terms are normally of four months duration and alternate with academic terms. For continuous co-op work experience of eight months or longer with the same employer, credit for more than one work term will only be granted if the requirements for an equivalent number of individual work terms are met. For example, the student must register for a second work term, pay additional fee assessments, complete a second work report and receive a second performance evaluation. Normally the second work term should also incorporate an increase in the student's responsibilities at the work place. For programs requiring a minimum of four work terms, normally at least three of the required work experiences must be separated from each other by at least one academic term.
- Work term reports are normally due during the first month following each work term, at a time established by the department, for evaluation as part of the assessment of the work term.
- In the event of a work stoppage within the first nine weeks of a work term, an attempt will be made to arrange an alternative work placement, to enable the student to complete the work term. If the work stoppage occurs after nine weeks, the work term will be accepted for credit providing all other work term requirements are met.
- The transferability of work terms from other institutions which offer Coop programs is determined by individual Coop departments on the merits of each completed work term. The number of work terms accepted for transfer must be not more than 50% of the total number required for completion of the Coop Program.
- Students who are taking double or combined major degrees (where each area offers a Coop program) may, if eligible, enroll in and undertake work terms in both Coop programs. Students who complete at least two work terms in each area will have the combined nature of their program noted as part of the Coop designation on their official records.
- To graduate from a Cooperative Education Program, students must complete satisfactorily the minimum number of work terms and maintain the academic standing required by individual departments. Students who elect to graduate before the completion of a work term will not have that work term count toward their degree program; if

this is a required work term, they will not graduate with the Coop designation.

- Students registered for work terms are considered to be enrolled in a full time course of studies and may not take university level credit courses without the permission of the appropriate department. Work term students who wish to enroll in a course should contact their Coop Coordinator.
- Students enrolled in Coop programs may be allowed to complete a 3 unit course commencing in September over a 16 or 20 month period, provided the department concerned consents. Students must obtain written permission from the department involved when registering in the course. In such cases, a temporary grade of CIC (Coop Interrupted Course) will be entered into the student's December transcript. The CIC grade is used only when a 3 unit course is interrupted by a work term. Unless there is formal withdrawal from the course, the temporary CIC grade will be changed to N (a failing grade) if the course is not completed within 20 months.

## GENERAL REGULATIONS (GRADUATE CO-OP)

- Approval to participate in graduate co-op is at the discretion of the student's department/school, in consultation with the Faculty of Graduate Studies and the Director, Cooperative Education Programs.
- Normally, some graduate coursework precedes the first graduate work term; exceptions must be approved by the Faculty of Graduate Studies and the Director, Cooperative Education Programs. The first work term must precede completion of program's academic requirements, and all work terms must be completed prior to completion of degree requirements.
- Students must register for each work term at the 800 level. Work terms are normally of 4-months duration — with a minimum of 13 weeks. Back-to-back work terms may be undertaken, but students must complete requirements for each work term in order to receive credit for two work terms. Students who wish to register for coursework while on a work term must have prior written approval from their academic supervisor and co-op coordinator.
- Once the work term has begun, students are not permitted to withdraw without penalty of failure unless specific written permission has been granted by the Director, Cooperative Education Programs.
- Each work term is evaluated on the basis of the student's performance of assigned work term tasks and a written submission. The work term period and evaluation (grading: COM, F, or N) are recorded on the student's official academic record. A failing grade (F or N) will be assigned if the student fails to complete satisfactorily the requirements for the work term, which include satisfactory performance on the work term and submission of a satisfactory work term report, normally no later than one month after the completion of the work term. The written report may constitute a thesis proposal or progress on the thesis. If not thesis-related, the report will focus on the program-related work and will be required to be of suitable quality for graduate level work as determined by the department/school. In departments where a formal Cooperative Education program exists, the coop coordinator will be responsible for ensuring the assessment of the work term and the submission of the grade; where no formal coop program exists, the graduate adviser will ensure the assessment of the work term and the submission of the grade.
- A coop program fee is charged for each term of work term registration. This fee is in addition to any tuition fees and student fees. It is due in the first month of each work term and subject to the normal university fee regulations (see page 23).
- To qualify for the coop designation upon graduation, a Master's degree requires a minimum of two work terms (of four month's duration each) and a Doctoral degree requires the completion of a minimum of three work terms. Specific program areas may require more work terms and some programs may, after formal assessment, provide partial exemptions for prior experience.
- Normally, a site visit will be undertaken by the student's thesis supervisor, departmental coop coordinator, graduate advisor or other appropriate faculty member.
- Students are designated as "coop" students once they register for the first work term.



## CO-OP JAPAN PROGRAM

The Co-op Japan Program is a national, multi-university program established in May 1991 under the auspices of the Federal Government's Pacific 2000 Japan Science and Technology Fund. The program provides senior science and engineering students from across Canada with the opportunity to gain valuable work experience in Japan.

The goal of the program is to develop a pool of young Canadian engineers and scientists with hands-on experience in Japanese industrial engineering and research practices. By enabling university students to develop an understanding and appreciation of Japanese industry, and by providing Japanese companies with the opportunity to take advantage of highly skilled and motivated students, the Co-op Japan program encourages long term opportunities for scientific and industrial exchange between Canada and Japan.

Students are selected from the faculties of Engineering and Arts and Science.

### Program Prerequisites

- Open to 3rd and 4th year students currently enrolled, full-time, in engineering or science programs
- Minimum academic performance B+ or 75% average
- Minimum 8 months prior related work experience (i.e. two cooperative education work terms or equivalent)
- Minimum 1 term of Japanese language (credit) or 2 terms (non-credit), OR equivalent experience, AND completion of a 4 week immersion Japanese language and culture program sponsored by the Co-op Japan Program.

- Time commitment: 8-12 months
- Minimum eligibility age of 19 years
- Open to Canadian citizens and permanent residents of Canada
- English language fluency

### Application and Placement Procedures

There are two opportunities per year for students to go to Japan — May and September.

- The placement period, including language training, will normally be eight to twelve months in duration
- The first four weeks of the period will involve a mandatory intensive language and culture preparation program. A student fee is levied for this program
- Following completion of the language and culture program, students will go directly to Japan
- Students are housed by the receiving company and receive a living allowance and local commuting expenses

### Application Submission Deadlines

| Application deadline | Student notification | Language training | Work placement begins |
|----------------------|----------------------|-------------------|-----------------------|
| 30 Sept 95           | Jan 96               | May 96            | June 96               |
| 31 Jan 96            | May 96               | Sept 96           | Oct 96                |

Student information packages are available from the Co-op Japan Program office located in the Campus Services Building. Or please call the program office at 721-6076 for further information.



# FACULTY OF ARTS AND SCIENCE

John T. Weaver, B.Sc. (Brist.), M.Sc., Ph.D. (Sask.), Dean of the Faculty and Dean of Science  
 G.R. Ian MacPherson, B.A. (Assumption U. of Windsor), M.A., Ph.D. (W. Ont.), Dean of Humanities  
 Louis D. Costa, A.B. (C.C.N.Y.), M.A., Ph.D. (Col.), Dean of Social Sciences  
 M. Elizabeth Watton, B.Sc., M.Sc. (McM.), Administrative Officer  
 Frank P. Robinson, A.B. (Fisk), Ph.D. (Alta.), Assistant Dean and Director of Academic Advising  
 Garry R. Charlton, B.A. (U. of Vic.), Advising Officer  
 Gillian M. Chamberlin, B.A. (U. of Vic.), Advising Officer  
 Lori S. Olson, B.Sc., M.P.A. (U. of Vic.), Advising Officer  
 Director, Humanities Centre (Appointment pending)  
 Mavor Moore, B.A. (Tor.), D.Litt. (York), Research Professor in Humanities

## DEGREES AND DIPLOMAS OFFERED

The degrees offered in this Faculty are Bachelor of Arts (B.A.), Bachelor of Commerce (B.Com.), Bachelor of Science (B.Sc.). The diplomas offered are Diploma in Applied Linguistics and Diploma in Humanities.

## ACADEMIC ADVICE

**Academic Advising Centre:** Academic advice for the Faculty of Arts and Science is available through the Arts and Science Advising Centre, A117 Clearihue Building. Students seeking information or advice regarding programs, courses, or University and Faculty regulations should consult the Arts and Science Advising Centre.

**Departmental Advising:** All academic departments have Advisers generally available throughout the Winter Session who can give detailed information regarding courses and programs within each discipline. Students wishing advice from departmental advisers during the summer months should write or telephone the department for an appointment. Students transferring into the Faculty of Arts and Science from a professional program should consult the department in whose discipline they plan to Major regarding their previous credit.

**Faculty of Education Advising:** Students in the Faculty of Arts and Science who wish to enter the Faculty of Education at a later date are advised to consult the Education Advising Centre, Room 250, MacLaurin Building, before they begin their studies in Arts and Science.

**Faculty of Engineering Advising:** Students in the Faculty of Arts and Science who wish to enter the Faculty of Engineering at a later date are advised to consult the Computer Science Coop Advising Office, Room D-257, Clearihue Building, before they begin their studies in Arts and Science.

## PROGRAM PLANNING

It is recommended that all students discuss their proposed programs with the Arts and Science Advising Centre and/or with Departmental Advisers well in advance of registration.

Students who may wish to transfer to another university to complete their degree are advised also to consult the university of their choice regarding required courses and transfer equivalencies.

**Record of Degree Program (Program Advice and Degree Review):** All students in the Faculty of Arts and Science are required to declare a degree program by completing a Record of Degree Program form in consultation with the Arts and Science Advising Centre, preferably near the beginning of their third year of studies and, in any event, not later than the second term of that year. The purpose of this form is to ensure that proposed courses will meet the requirements for the degree program selected.

**Limitation of Enrollment:** In certain programs of study, it may not be possible to accommodate all those seeking entry. Consequently, even though applicants may be admissible to the University, the Faculty of Arts and Science may not find it possible to allow the students entry into the program of their first choice. In addition to enrollment limitations, it may be necessary to limit registration in individual courses.

## REQUIREMENTS COMMON TO ALL BACHELOR'S DEGREES IN ARTS AND SCIENCE

Each candidate for a bachelor's degree is required:

- to have satisfied the University English Requirement (see page 13);
- to include in the first 15 units presented for the degree not more than 9 units from any single department, and at least 3 units from each of two other departments;
- to include in the next 15 units presented for the degree not more than 12 units from any single department, and at least 3 units from one other department;
- to include in the remaining units presented for the degree at least 21 units of courses numbered at the 300 or 400 level (this is a general University requirement); 18 of these units must be taken at the University of Victoria;
- to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 30 of these 60 units must normally be completed at this University (these are general University requirements; also see Credit by Course Challenge, page 18);
- to present at least 33 units (of the minimum 60 units required for a degree) of courses from *one* of the two following lists, thereby determining the degree requested:

### Bachelor of Arts

Anthropology  
 Classics  
 Economics  
 English  
 Environmental Studies  
 French Language and Literature  
 Geography  
 Germanic Studies  
 Hispanic and Italian Studies  
 History  
 Liberal Studies  
 Linguistics (certain courses only)  
 Mathematics and Statistics  
 Medieval Studies  
 Pacific and Asian Studies  
 Philosophy  
 Political Science  
 Psychology  
 Slavonic Studies

### Bachelor of Arts cont'd

Sociology  
 Women's Studies  
 plus Bachelor of Science fields listed under "General Programs Leading to the BA: Option B", page 43

### Bachelor of Science

Biochemistry and Microbiology  
 Biology  
 Chemistry  
 Computer Science  
 Earth Sciences  
 Economics  
 Geography  
 Linguistics (certain courses only)  
 Mathematics and Statistics  
 Physics and Astronomy  
 Psychology

- to meet the requirements for the degree program selected; see below, and under the individual departments and schools, pages 45 to 162.

## DEGREE PROGRAMS LEADING TO THE B.A. AND THE B.Sc.

A student may proceed to either the B.A. or the B.Sc. degree, normally in one of three Programs: Honours, Major, or General (but see section on Joint Honours and Major, below). In most cases, by choosing courses carefully and consulting departmental requirements and prerequisites, students may postpone until the end of the Second Year the decision as to which program to select.

## THE HONOURS PROGRAM

The Honours Program requires specialization in a single field in the last two or three years and is intended for students of above average ability. Students who plan to undertake graduate work are strongly advised to follow an Honours Program.

### Admission to an Honours Program

Students planning to proceed in an Honours Program must consult the Chair of the department concerned, or the Chair's nominee, as early as possible in their academic career, and in any case, must obtain the consent of the department concerned to enter its Honours Program. This consent will normally be given only if:

- the department offers an Honours Program;



- (b) the student has fulfilled the requirements of the first two years and has a grade point average of at least 3.50 in the work of the Second Year and in the field in which the student wishes to specialize; and
- (c) the student has completed all prerequisite courses.

The department concerned must annually renew its permission for a student to continue on an Honours Program. If, in the opinion of the department, the student's work at any time is not of Honours standard, the student may be permitted to transfer to a Major or General program.

#### Requirements of the Honours Program

The number of units required for an Honours Program varies between 60 and 66, depending upon the requirements of the department concerned, which are set out on pages 45 to 162 of this Calendar, and which must be satisfied along with the requirements common to all Bachelor's degrees in Arts and Science given above.

A candidate for Honours may be required to present a graduating essay, to pursue a program of directed studies, or to participate in an Honours seminar. The final date for submitting graduating essays or research reports to the departments in the second term is left to the discretion of the department concerned.

A candidate for Honours may be required at the end of the final year to take a comprehensive examination — oral, written, or both.

*Normally a student should complete the requirements for an Honours Program in four academic years. Students who are planning to complete a degree on a part time basis and who wish to be considered candidates for Honours should explore the options with the department concerned. Requests for extensions should be made through the department concerned to the Dean's office.*

Honours degrees will be granted graduation standing "With Distinction" if the student has a graduating average of 6.50 or higher and has satisfied any additional requirements specified by the Department concerned. Students whose graduating average is greater than 6.50 but who do not satisfy the Departmental requirements for Honours "With Distinction" may qualify for a Major or General degree "With Distinction". See Graduation Standing, page 44.

#### Honours Programs Leading to the B.A. or the B.Sc. Degree

A student may proceed to the B.A. or the B.Sc. degree in an Honours Program in one of the following:

##### Bachelor of Arts

Anthropology  
Applied Linguistics  
Classics  
Classical Studies  
Economics  
English  
French  
Geography  
German  
Greek  
Hispanic Studies  
History  
Latin  
Linguistics  
Mathematics  
Philosophy  
Political Science  
Psychology  
Sociology  
Statistics  
Women's Studies

##### Bachelor of Science

Astronomy  
Biochemistry  
Biology  
Chemistry  
Combined Chemistry  
and Mathematics  
Combined Computer Science  
and Mathematics  
Earth Sciences  
Economics  
Geography  
Linguistics  
Mathematics  
Microbiology  
Physics  
Physics and Astronomy  
Physics and Earth Sciences  
Physics and Mathematics  
Physics and Ocean Sciences  
Psychology  
Statistics

**Combined Honours:** Offered in Chemistry/Mathematics; Computer Science/Mathematics and Computer Science/Statistics. See pages 59, 68 and 121 for details.

**Double Honours:** With the joint approval of the departments concerned, a student may be permitted to meet the requirements for an Honours Program in each of two departments, both leading to the same degree, a B.A. or a B.Sc. Such a program may require an extra year of study, in which case approval of the Dean should be sought.\*

**Joint Honours and Major Programs:** Where it is possible to do so within the period of four academic years required for Honours Programs, a student may elect to complete an Honours Program in one area of study together with a Major Program in another area of study, both leading to the same degree, a B.A. or B.Sc.\*

Alternatively, a student may, with permission from the Dean, arrange for a Joint Honours and Major Program which will involve satisfying the Honours requirements and the Major requirements of two disciplines within the Faculty of Arts and Science, one of which leads to the B.Sc. degree while the other leads to the B.A. degree. In such cases, the student will receive either a B.Sc. or a B.A. degree, depending on which is specified by the Honours Program. Details of all such programs must be agreed upon by the student, the representatives of the academic units involved, and the Dean. The signed agreement will be on file in Records Services.

## THE MAJOR PROGRAM

The Major Program requires some specialization in one field in the last two years, and may permit the student to proceed to graduate study if sufficiently high standing is obtained, or to professional or business careers.

#### Requirements of the Major Program

Students must consult individual departmental requirements and prerequisites, which are set out on pages 45 to 162 of this Calendar, and which must be satisfied along with the requirements common to all Bachelor's degrees in Arts and Science given above.

The Major Program requires:

- the completion of the first 30 units in conformity with the requirements common to all Bachelor's degrees in Arts and Science given above;
- the completion of the remaining units in conformity with the requirements common to all Bachelor's degrees in Arts and Science given above, and including the following:
  - 15 units of courses numbered 300 or 400, selected to meet the requirements of the Major program, as specified by the department concerned; 12 of these units must be taken at the University of Victoria;
  - at least 15 units of electives, which may include not more than 9 units prescribed by the Major department as corequisites.

#### Major Programs Leading to the B.A. and B.Sc.

A student may proceed to the B.A. or the B.Sc. degree in a Major program in one of the following:

##### Bachelor of Arts

|                     |                  |                   |
|---------------------|------------------|-------------------|
| Anthropology        | Geography        | Pacific Studies   |
| Applied Linguistics | German           | Philosophy        |
| Classical Studies   | Hispanic Studies | Political Science |
| Classics            | History          | Psychology        |
| Economics           | Linguistics      | Russian           |
| English             | Mathematics      | Sociology         |
| French              | Medieval Studies | Women's Studies   |

##### Bachelor of Science

|                |              |
|----------------|--------------|
| Astronomy      | Geography    |
| Biochemistry   | Linguistics  |
| Biology        | Mathematics  |
| Chemistry      | Microbiology |
| Earth Sciences | Physics      |
| Economics      | Psychology   |

In addition, a student may proceed to a bachelor's degree in a Major program in one of the following Interdisciplinary Programs:

**B.A. or B.Sc. Major in Environmental Studies:** This is an interdisciplinary program designed to provide students with a concentration of courses in the area of environmental topics. A Major Program leading to the B.A. or the B.Sc. degree is offered, but the Major can only be taken as a Double Major or as a Joint Honours and Major with a second program in a discipline listed above. For details of the Environmental Studies program, see departmental entry.

**Combined Major:** A student may elect to complete the requirements for a Combined Major Program leading to a B.A. in English and French (Canadian Literature) or to a B.Sc. in the following areas: Computer Science/Mathematics; Computer Science/Statistics; Chemistry/Mathematics; Biochemistry/Chemistry; Physics/Earth Sciences; Physics/Ocean Sciences; Microbiology/Chemistry; and Physics/Astronomy.

**Double Major:** A student may elect to complete the requirements for each of two Major Programs offered in the Faculty, both leading to the same degree, a B.A. or a B.Sc., except that Biochemistry cannot be



combined with Microbiology and Physics cannot be combined with Astronomy for a double major, nor can any Combined Major program be used as a double major with a major program offered by either component department.\*

Students may, with permission of the Dean, arrange for a Double Major program which will involve satisfying the Major requirements of two disciplines in the Faculty of Arts and Science, one of which normally offers programs leading only to the B.Sc. degree, while the other offers programs leading only to the B.A. degree. In such cases, the student will have the option of receiving either a B.A. or a B.Sc. Double Major degree. When one of the two departments concerned offers both a B.Sc. Major program and a B.A. Major program, the requirements of the program leading to the degree selected must be met in the department offering the option. Details of all such programs must be agreed upon by the student, the representatives of the academic units involved, and the Dean. The signed agreement will be on file in Records Services.

**Interfaculty Double Honours or Major:** Students may arrange for an Interfaculty Double Honours or Major program through the Arts and Science Advising Centre. Such programs involve satisfying the Honours or Major requirements of two disciplines in two different Faculties. Agreement to details of all such programs must be signed by the students and by representatives of the academic units involved. Students on the interfaculty program will be subject to the regulations of the Faculty in which they are registered.\*

\* A student proceeding towards a B.A. or B.Sc. in a Double Honours, Joint Honours and Major, Double Major or Interfaculty Double Major program, shall be entitled to no more than one bachelor's degree upon completion of any of these programs. Students seeking a second bachelor's degree should consult the regulations on page 23 under A Second Bachelor's Degree.

## THE GENERAL PROGRAM

The General Program may lead to professional careers or to graduate studies, depending upon the level of competence demonstrated therein; its distinctive characteristic, however, is the breadth of the education for which it provides.

### Requirements of the General Program

Students must consult individual departmental requirements and prerequisites, which are set out on pages 45 to 162 of this Calendar, and which must be satisfied along with the requirements common to all Bachelor's degrees in Arts and Science given above.

The General Program requires:

- the completion of the first 30 units in conformity with the requirements common to all Bachelor's degrees in Arts and Science given above;
- completion of the remaining units in conformity with requirements common to all Bachelor's degrees in Arts and Science given above, and including the following:
  - 9 units taken in courses numbered 300 and above in each of *two* fields, as specified by the departments concerned; 6 of the units in each field must be taken at the University of Victoria;
  - 12 units of electives which may include not more than 6 units prescribed by the departments as corequisites.

### General Programs Leading to the B.A.

#### Option A

A student may proceed to a B.A. degree in a General program in any *two* of the following:

|                  |                      |
|------------------|----------------------|
| Anthropology     | Japanese Studies     |
| Chinese Studies  | Linguistics          |
| Classics         | Mathematics          |
| Economics        | Medieval Studies     |
| English          | Pacific Studies      |
| French           | Philosophy           |
| Geography        | Political Science    |
| German           | Professional Writing |
| Hispanic Studies | Psychology           |
| History          | Russian              |
| Italian Studies  | Sociology            |
|                  | Women's Studies      |

#### Option B

A student may also proceed to the B.A. degree in a General program which combines *one* of the above fields with *one* of the following:

|                               |                  |
|-------------------------------|------------------|
| Biochemistry and Microbiology | Computer Science |
| Biology                       | Earth Sciences   |
| Chemistry                     | Physics          |

#### Option C

A student may also proceed to the B.A. degree in the General program by combining any *one* of the fields listed in Options A or B with *one* of the following:

|                       |                  |
|-----------------------|------------------|
| Arts of Canada        | Film Studies     |
| Environmental Studies | Medieval Studies |

### General Programs Leading to the B.Sc.

A student may proceed to a B.Sc. degree in a General program in any *two* of the following:

|                               |             |
|-------------------------------|-------------|
| Biochemistry and Microbiology | Mathematics |
| Biology                       | Physics     |
| Chemistry                     | Psychology  |
| Computer Science              |             |
| Earth Sciences                |             |
| Geography                     |             |

## MINOR

A student who elects to complete the course requirements for an Honours or Major program and, in addition, completes those courses prescribed for one of the fields listed under the General Program, will receive a Minor in that field. The Minor would be added to the student's academic record only if the courses taken for the Minor do not form part of the requirements for the Honours or Major program and only if the student formally declares the Minor Program through the Arts and Science Advising Centre. Only one Minor may be declared on any degree program.

**Interfaculty Minor:** A student who completes the requirements for a degree in another faculty and, in addition, completes those courses prescribed for one of the fields listed under the General Program in the Faculty of Arts and Science may receive a Minor in that field. The Minor will be added to the student's academic record only if the student formally declares the Minor Program through the faculty administering the Bachelor's degree. Only one Minor may be declared on any degree program.

## DEGREE PROGRAMS LEADING TO THE B.Com.

For admission requirements and programs leading to a B.Com., see The Faculty of Business, page 163.

## COOPERATIVE EDUCATION PROGRAMS

Please refer to page 38 of the Calendar for a general description of Cooperative Education.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. In general, students participating in the Cooperative Education Program must maintain at least a second class (3.50) average overall. As a required part of the program, students are employed for specific Work Terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

In addition to the graduation requirements outlined on page 20, a student must have a graduating average of at least 3.50 in order to graduate with the Cooperative Education notation.

Students may withdraw from the Cooperative Education program at any time and may remain enrolled in a Major or Honours program offered by the Department.

Details of the undergraduate programs in Biology, Biochemistry and Microbiology, Chemistry, Computer Science, Geography, Mathematics, and Physics are outlined in the departmental sections of the Calendar.



The Arts Cooperative Education Program, offered by the Departments in the Humanities Division of the Faculty, has specific admission requirements and standards in addition to those mentioned above. This program is described on page 49.

## DIPLOMA PROGRAMS

Two diploma programs are offered: the Diploma in Applied Linguistics, offered by the Department of Linguistics (see page 116), and the Diploma in Humanities, offered by the departments in the Humanities Division of the Faculty (see page 116).

## OTHER INFORMATION REGARDING CREDIT AND COURSES

### CREDIT FOR SUMMER STUDIES COURSES

Credit obtained in May-August courses may be combined with that obtained in Winter Session to complete degree requirements. The maximum credit for May-August work in any one calendar year is 9 units (see Summer Studies entry elsewhere in this Calendar and the Summer Studies Supplement to the Calendar, published in January).

### TIME LIMIT FOR DEGREE COMPLETION

Although the Faculty of Arts and Science imposes no time limit for the completion of a General or Major B.A. or B.Sc., Honours degrees are normally completed within four years. Certain departments, with the approval of Faculty, may impose stated time limits for the completion of Major and General programs in their areas.

### LANGUAGE LABORATORIES

Many courses offered by modern language departments include language laboratories intended to reinforce the learning of basic speech patterns and idioms and to complement the active use of the language in the classroom.

## CREDIT FOR COURSES OFFERED BY OTHER FACULTIES

### Recognized Courses Offered by Other Faculties:

All courses offered by the Department of Computer Science (Faculty of Engineering) are acceptable for credit in the Faculty of Arts and Science.

The following First Year courses in the Faculty of Fine Arts are recognized for elective credit in the Faculty of Arts and Science:

- Art 150
- Writing 100/101
- History in Art 120
- Music 101 A/B, 110, 115
- Theatre 110 (formerly 100)

Students in other than First Year should note that the following courses in the Faculty of Education and the Faculty of Fine Arts, in addition to those mentioned above, are acceptable for elective credit in the Faculty of Arts and Science.

- ACAN 225/FA 225
- Art 350
- Writing: All courses marked with an asterisk
- Fine Arts Interdisciplinary Courses: All courses marked with an asterisk
- History in Art: All courses marked with an asterisk
- Music: All courses marked with an asterisk
- Theatre: All courses marked with an asterisk

**Other Courses outside the Faculty of Arts and Science:** In addition to the above courses, students are permitted to take for credit a total of 6 units of free electives chosen without restriction from any undergraduate courses offered in this University (except for Physical Education activity courses, e.g. 104-125, 361, 461, 463, and School Experience or Practicum courses, e.g. Education-P 197, 297, 398, 498), where the regulations of the departments offering the courses permit, and prerequisites are met.

In exceptional cases, a student in a Major or Honours program may receive additional units of credit towards a degree program in the Faculty of Arts and Science for undergraduate courses not recognized in the Faculty of Arts and Science, provided that **prior** written recommendation has been made by the Major or Honours Department concerned to the Assistant Dean of Arts and Science, and his prior approval obtained. In no case, however, may such credit be used to replace that specified for the Major or Honours program selected, nor may the credit for such courses be later transferred to another Major or Honours program unless the credit is then accepted by the department concerned.

Students on a General program who may wish to receive credit for more than 6 units of unrecognized courses offered by other faculties must secure the approval of the Assistant Dean of Arts and Science.

## CREDIT FOR STUDIES ELSEWHERE

Students who plan to undertake work at other universities must receive prior approval from the Assistant Dean if they wish such courses to be credited towards a degree program in the Faculty of Arts and Science. This applies particularly to courses at the 300 and 400 level and to courses which are included in the last 15 units of a degree program. Upon successful completion of such work, the student must request the Registrar of the other university to send an official transcript of record to Records Services of the University of Victoria.

Because of the delay in obtaining official transcripts, students completing their degree requirements at another institution during the second term of the winter session (January-April) are not eligible to graduate at May convocation. They must apply for a succeeding convocation. This regulation does not apply to students completing degree requirements in a program offered in partnership between the University of Victoria and a regional college.

Students authorized to attend another institution who accept a degree from that institution abrogate the right to a University of Victoria degree until they have satisfied the University's requirements for a second bachelor's degree (see page 23).

Normally, the Faculty requires all students qualifying for a degree to complete at the University of Victoria at least twelve upper level units of the fifteen required for a Major Program, or at least six of the nine upper level units required in each area of the General Program. Students on Honours programs normally may take at another university no more than six upper level units in the discipline in which they are taking Honours, and then only with the approval of the Honours Adviser. In addition, students should complete at the University of Victoria at least eighteen of the twenty-one upper level units required for all degree programs.

## GRADUATION STANDING

The graduation standing of students in the Faculty of Arts and Science is determined in accordance with the University regulations on page 23 of the Calendar, except that the determination of standing "With Distinction" in an Honours program may be subject to conditions specified by the department concerned. Honours students should note, in particular, that the graduating average alone may not form the basis for determining eligibility for standing "With Distinction".

When a student graduates in a Double Honours program or a Joint Honours and Major program, the standing "With Distinction" shall be determined in accordance with the regulations of each of the two disciplines. If one discipline is governed only by the University regulation (page 23), then in the computation of the graduating average for this discipline, 15 units of the discipline's own required courses shall be used when the number of units earned in upper level courses exceeds 30.

In any case where one discipline in a Double Honours program or a Joint Honours and Major program qualifies for graduation standing "With Distinction" and the other does not, that graduation standing shall be tied to the respective discipline instead of the degree, and shall be shown in the student's academic record.



## COURSES OPEN TO FIRST YEAR STUDENTS

For the guidance of students entering First Year, the following is a list of courses open to First Year students. In some cases prerequisites are specified. In others permission of the department is required. Students should consult the appropriate departmental entry elsewhere in this Calendar. Under certain circumstances, courses numbered 300 and above may be included in a student's graduating average (see page 23).

Anthropology 100A, 100B  
Arts of Canada 225  
Astronomy 120  
Biology 150A/B, 210, 215, 220  
Chemistry 091, 092, 101, 102  
Chinese 100A/B, 149, 150,  
201A, 201B, 202  
Classical Studies 100, 200, 250

Earth and Ocean Sciences 100,  
101  
Economics 100, 201, 202  
English 099, 115, 116, 121, 122,  
150, 151, 181, 182  
French 100, 160, 165, 180, 181,  
182, 190, 202  
Geography 101A/B

German 100, 103, 149, 200  
Greek 100  
History 105, 130, 205, 210, 220,  
234, 236, 240, 250, 251, 253,  
254, 255, 256, 257, 260, 261,  
265  
History in Art 295  
Italian 100, 200  
Japanese 100A/B, 101A/B, 149,  
150, 201A/B  
Latin 100  
Liberal Arts 306, 307  
Linguistics 100A, 100B, 290  
Mathematics 100, 101, 102, 103,  
120, 151, 160A, 160B  
Medieval Studies 210

Pacific Studies 200A & B  
Philosophy 100, 201, 203,  
211, 214, 220, 232, 233,  
235, 238, 242, 245, 269, 287  
Physics 102, 103, 112, 120,  
125, 220  
Political Science 100  
Psychology 100A, 100B  
Russian 100, 149, 301, 304,  
331, 390  
Serbo-Croatian 300  
Sociology 100, 103  
Southeast Asia 100A & B  
Spanish 100, 200, 250, 260  
Statistics 255, 256, 260, 261  
Women's Studies 100, 200A/B

## UNDERGRADUATE COURSES IN ARTS AND SCIENCES

| Course   | Page | Italian  | Page |
|--|------|--|------|
| Anthropology                                       | 46   | Japanese   | 129  |
| Arts of Canada                                     | 45   | Latin  | 64   |
| Arts Cooperative                                   | 49   | Liberal Arts   | 116  |
| Astronomy  | 139  | Liberal Studies (Malaspina)                          | 162  |
| Biochemistry                                       | 49   | Linguistics  | 116  |
| Biology  | 52   | Malaspina Collaborative Programs                     | 162  |
| Biology (Malaspina)                                | 162  | Marine Science                                       | 52   |
| Chemistry  | 59   | Mathematics  | 121  |
| Chinese  | 129  | Medieval Studies                                     | 128  |
| Classical Studies                                  | 64   | Microbiology   | 49   |
| Commerce (see Faculty of Business)                 |      | Pacific Studies                                      | 129  |
| Computer Science (see also Faculty of Engineering) | 68   | Philosophy   | 136  |
| Earth and Ocean Sciences                           | 70   | Physics  | 139  |
| Economics  | 74   | Political Science                                    | 145  |
| English  | 79   | Portuguese   | 106  |
| Environmental Studies                              | 88   | Professional Writing (see also Faculty of Fine Arts) | 79   |
| Film Studies                                       | 91   | Psychology   | 149  |
| French   | 91   | Russian  | 155  |
| Geography  | 96   | Serbo-Croatian                                       | 155  |
| German   | 102  | Slavonics  | 155  |
| Greek  | 64   | Southeast Asian Studies                              | 129  |
| Hispanic Studies                                   | 106  | Sociology  | 157  |
| History  | 109  | Spanish  | 106  |
| History in Art (see Faculty of Fine Arts)          |      | Statistics   | 121  |
| Humanities   | 116  | Women's Studies                                      | 159  |

## PROGRAM IN THE ARTS OF CANADA

The Division of Humanities and the Faculty of Fine Arts jointly offer an interdisciplinary program in the **Arts of Canada**, intended to give students the opportunity to gain a broad knowledge of Canada's artistic diversity. This is a General Program leading to the B.A. degree (see General Program page 43). Students may obtain a Minor by completing the requirements for the General Program together with a Major or Honours program in another department or faculty (see Minor and Interfaculty Minor, page 43). These programs lead to either a B.A. or a B.Sc. degree. Students in this program are required to take the 3-unit introductory course, ACAN 225 (FA 225), plus nine units of 300 and 400 level courses representing at least three different areas selected from

the list below. If any course forms part of the student's Major, Honours, or General Program in another department, it cannot be used to fulfill the requirements for a Minor in the **Arts of Canada**.

|         |          |  |
|---------|----------|--|
| English | 202 (3)  | An Introduction to Canadian Literature |
|         | 448 (1½) | Special Studies in Canadian Literature |
|         | 450 (1½) | Modern Canadian Fiction: I             |
|         | 451 (1½) | Modern Canadian Fiction: II            |
|         | 452 (1½) | Modern Canadian Poetry: I              |
|         | 453 (1½) | Modern Canadian Poetry: II             |



|                |                |   |
|----------------|----------------|---|
|                | 457 (3)        | Traditions in Canadian Literature                               |
|                | 458 (1½)       | Comparative Studies in French and English Canadian Literature   |
|                | 459 (1½)       | Early Canadian Prose Literature                                 |
| Fine Arts      | 315 (1½ or 3)  | Introduction to Canadian Cultural Policy                        |
|                | 325 (1½ or 3)  | Issues in Contemporary Culture                                  |
|                | 360 (1½ or 3)  | Introduction to Issues in Arts Criticism                        |
| French         | 389B (1½)      | Quebec Cinema   |
|                | 480 (1½)       | The French-Canadian Novel from the Origins to the Modern Period |
|                | 482 (1½)       | Contemporary French-Canadian Novel                              |
|                | 484 (1½)       | Contemporary French-Canadian Theatre                            |
|                | 485 (1½)       | French-Canadian Poetry  |
|                | 487 (1½)       | English 458   |
|                | 488D (1½)      | French-Canadian Literature outside Quebec                       |
| History in Art | 368A (1½)      | History of Early Canadian Art                                   |
|                | 368B (1½)      | History of Twentieth Century Canadian Art                       |
|                | 382A (1½)      | Native North American Arts                                      |
|                | 384 (1½)       | Arts of the Northwest Coast                                     |
|                | 468 (1½)       | Special Studies in Canadian Art                                 |
|                | *480 (1½ or 3) | Topics in 20th Century Native North American Art                |
|                | *482 (1½)      | Special Studies in Tribal Arts                                  |

|         |               |                                       |
|---------|---------------|---------------------------------------|
| Music   | 324 (1½ or 3) | Music in Canada                       |
| Theatre | 414 (1½)      | Studies in Canadian Theatre and Drama |

\*Because the topic of this course varies from year to year it must be approved by the Associate Dean of Fine Arts for credit towards an Arts of Canada Program.

Although there is no formal language requirement for the Program, students are strongly advised to develop proficiency in French. By permission of the instructor of the Department of French Language and Literature, students may take any of the above fourth year French literature courses (to a maximum of three units) under the rubric of FREN 301 (French Literature as an Elective).

Students are strongly urged to take advantage of electives which provide a strong historical, sociological, economic, linguistic, political background to the study of Canadian arts. These should be chosen in consultation with the Director of the Program.

## COURSES

### ACAN 225 (FA 225) (3) INTRODUCTION TO THE ARTS OF CANADA

An interdisciplinary examination of Canada's cultural identity and of current issues facing the arts in both French and English speaking Canada. Topics to be considered include aboriginal arts, theatre, history in art, visual and literary arts, music, multiculturalism, broadcasting and cultural policies.

Y(3-0)

## DEPARTMENT OF ANTHROPOLOGY

David S. Moyer, B.A. (Franklin and Marshall Coll.), M.A. (Harv.), Ph.D. (Leiden), Associate Professor and Chair of the Department  
 William H. Alkire, B.A. (Wash.), M.A. (Hawaii), Ph.D. (Ill.), Professor  
 N. Ross Crumrine, B.A. (Northw.), M.A., Ph.D. (Ariz.), Professor  
 Leland H. Donald, B.A. (Emory), Ph.D. (Ore.), Professor  
 Orville S. Elliot, A.B. (Middlebury), A.M., Ph.D. (Harv.), Associate Professor  
 Nicolas Rolland, B.Sc., M.A. (Montr.), Ph.D. (Cantab.), Professor  
 Peter H. Stephenson, B.A. (Ariz.), M.A. (Calg.), Ph.D. (Tor.), Professor  
 Eric A. Roth, B.A. (Missouri), M.A., Ph.D. (Tor.), Associate Professor  
 Kathleen A. Berthiaume, B.A. (U. of Vic.), M.A., Ph.D. (Mich.), Assistant Professor  
 Margo L. Matwychuk, B.A. (Winn.), M.Phil., Ph.D. (C.U.N.Y.), Assistant Professor  
 Margot E. Wilson-Moore, B.A., M.A. (Tor.), M.A., Ph.D. (Southern Methodist), Assistant Professor

### Visiting, Adjunct and Cross-listed Appointments:

Steven R. Acheson, B.A. (S. Fraser), M.A. (U. of Vic.), Ph.D. (Oxon.), Adjunct Assistant Professor (1993-95)  
 S. Gay Frederick, B.A. (Brit. Col.), M.A. (U. of Vic.), Ph.D. (Brit. Col.), Adjunct Assistant Professor (1993-95)  
 Hartmut B. Krentz, B.A. (San Jose), Ph.D. (Wash.), Visiting Assistant Professor (1994-95)

## GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 297.

### GENERAL, MAJOR AND HONOURS PROGRAMS

While neither Anthropology 100A nor 100B is required for the General Major, or Honours programs, First Year students who plan to undertake any of these programs are urged to enroll in the introductory courses.

**General** — *Second Year*: 200A, 200B, 240 and 250; *Third and Fourth Years*: nine additional units of Anthropology chosen from courses numbered 300 and above.

**Major** — *Second Year*: 200A, 200B, 240 and 250; *Third and Fourth Years*: a total of 15 units in Anthropology consisting of:

- (a) 300A;  
 (b) at least one of 341A, 341B or 342;  
 (c) at least one of 350A, 350B, 353, 451 or 453;  
 (d) one and a half units of 322, 323, 324, 325, 326, 327, 329, 330, 332, 334; and an additional one and a half units from the preceding list or from 335, 336, 339A, 339B;  
 (e) three units from 316, 317, 400A, 400B, 401, 418, 441;  
 (f) an additional three units from 300B, 300C, 304, 305, 306, 310, 311, 312, 341A, 341B, 342, 350A, 350B, 353, 405, 406, 407, 419, 449, 451, 453;  
 (g) an additional 1½ units from d, e or f.
- B. at least 1½ units from Linguistics 100A, 100B, 360, 361, or 1½ units of Linguistics chosen in consultation with the Department of Anthropology.

Students who are allowed to take 390 or 490 should consult the Department when planning their programs.

NOTE: Anthropology 341A, 341B, or 342 cannot be used to satisfy both requirements (b) and (f). Anthropology 350A, 350B, 353, 451, 453 cannot be used to satisfy both requirements (c) and (f). The course used to satisfy (g) cannot be used to satisfy (b), (c), (d), (e) or (f).

**Honours** — *Second Year*: Students who have achieved at least high Second Class standing in Anthropology 200A, 200B, 240 and 250 may be admitted to the Third Year in the Honours Program with the permission of the Department; *Third and Fourth Years*: Students will offer at least 30 units of which 22½ must be in Anthropology and include:

- (a) 300A; 350A; 350B; 499; and at least two of 341A, 341B, 342;  
 (b) three units chosen from 316, 317, 400A, 400B;  
 (c) one and a half units from 322, 323, 324, 325, 326, 327, 329, 330, 332, 334; and an additional one and a half units either from the preceding lists, or from 335, 336, 339A, 339B;  
 (d) six units chosen to include at least one and a half units from each of the following groups:



- (i) 300B, 300C, 304, 305, 306, 310, 311, 312;
- (ii) 341A, 341B, 342, 353, 449, 451, 453;
- (iii) 401, 405, 406, 407, 418, 419, 441.

In addition students will be expected to achieve satisfactory standing in at least three units of courses in Linguistics chosen in consultation with the Department.

NOTE: Anthropology 341A, 341B or 342 cannot be used to satisfy both requirements (a) and (d).

In addition to University requirements concerning Honours Degrees, the Department of Anthropology requires: (1) a grade point average of 6.50 or higher in upper level courses in Anthropology for a First Class Honours Degree and (2) a grade point average of 3.50-6.49 in upper level courses in Anthropology for a Second Class Honours Degree. A student who fails to attain a grade point average of 3.50 or higher but who completes the requirements for the Major Degree may be awarded a Major Degree.

## UNDERGRADUATE COURSES

### Prerequisite for Third and Fourth Year Courses:

Courses numbered 300 and above may be chosen as electives if one of the following conditions is satisfied:

Courses numbered 300 and above can be taken if the prerequisites are met or if the student has at least Third Year standing and permission of the Department. For courses carrying A or B designations, A is NOT a prerequisite of B unless this is specifically stated.

Students should consult the Department concerning courses offered in a particular year.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### ANTH 100A (formerly half of 100) (1½) INTRODUCTION TO HUMAN EVOLUTION AND PREHISTORY

An introductory survey of the fields of biological anthropology and prehistoric archaeology; topics include the basis of human evolution, a survey of nonhuman primates, the human fossil record, cultural beginnings and stone age cultures, origins and development of agriculture and urban civilizations. (3-0)

### ANTH 100B (formerly half of 100) (1½) INTRODUCTION TO CULTURAL ANTHROPOLOGY

An introductory survey of the field of ethnology; topics for discussion include subsistence patterns, political and economic systems, kinship, language, religion and magic. (3-0)

### ANTH 200A (formerly half of 200) (1½) CULTURAL AND SOCIAL ANTHROPOLOGY: I

An introduction to the analysis of sociocultural systems. Major topics to be considered include the concept of culture, subsistence, production and distribution systems, and social organization and kinship. Examples will be taken from societies representing different levels of complexity and various parts of the world. (Prerequisite: At least Second Year standing or completion of 100B) (3-0)

### ANTH 200B (formerly half of 200) (1½) CULTURAL AND SOCIAL ANTHROPOLOGY: II

A continuation of 200A. Major topics to be considered include political, religious, and symbolic systems, expressive culture, and culture change. Examples will be taken from societies representing different levels of complexity and various parts of the world. (Prerequisite: 200A) (3-0)

### ANTH 240 (1½) ARCHAEOLOGY

An introduction to archaeological research and problems of interpretation. Laboratories will provide an opportunity to become familiar with archaeological materials and with some basic techniques of analysis. (Prerequisite: At least Second Year standing or completion of 100A) (2-2)

### ANTH 250 (1½) PHYSICAL ANTHROPOLOGY

An introduction to the investigation of biological characteristics of human populations; evolution of human populations. Laboratories will introduce students to some basic techniques used in the study of physical anthropology. (Prerequisite: At least Second Year standing or completion of 100A) (2-2)

### ANTH 300A (formerly part of 300) (1½) KINSHIP AND MARRIAGE

Comparative analysis of kinship and kinship based groups, especially descent groups; marriage in cross cultural perspective; the emphasis is placed on nonstate societies. (Prerequisite: a grade point average of at least 3.50 for 200A and 200B) (3-0)

### ANTH 300B (formerly part of 300) (1½) COMPARATIVE SOCIAL STRUCTURE

Comparative analysis of social structure emphasizing material from nonstate societies; age and gender provide a focus for discussion of nonkin based institutions. (Prerequisite: 300A) (3-0)

### ANTH 300C (formerly part of 300) (1½) COMPLEX SOCIETIES IN CROSS CULTURAL PERSPECTIVE

Cross cultural analysis of societies where stratification and/or the state are major features of society; peasant society, caste, slavery, and the development of social inequality are among the major topics discussed. (Prerequisite: 300A) (3-0)

### ANTH 304 (1½) TECHNOLOGY IN CULTURE

A review of technology from its protocultural foundations. The course surveys various techniques and places them in chronological, geographical and cultural context. (Prerequisite: 100A or 100B, or 200A and 200B, or 321) (3-0)

### ANTH 305 (1½) ANTHROPOLOGY OF THE ARTS

Comparative approaches to the arts in different cultural traditions with special emphasis on the arts of prehistoric and nonliterate cultures. (Prerequisite: 100B, or 200A and 200B, or 321) (3-0)

### ANTH 306 (1½) FOLKLORE AND MYTHOLOGY

Oral traditions of nonliterate peoples. The structure and functions of specific types of material. The relation of the study of folklore and mythology to other interests in Anthropology. (Prerequisite: 100B, or 200A and 200B, or 321) (3-0)

### ANTH 310 (1½) ANTHROPOLOGICAL APPROACHES TO COMPARATIVE RELIGION

Consideration of the various approaches to the study of religion and religious behaviour used by anthropologists. Comparative analysis of belief and ritual systems. (Prerequisite: 100B, or 200A and 200B, or 321) (3-0)

### ANTH 311 (formerly 211) (1½) INTRODUCTION TO APPLIED ANTHROPOLOGY

An introduction to the acquisition of culturally appropriate data for the solution of practical problems arising in the context of social change. The course surveys applications of anthropological research to various fields such as agricultural development, population planning, the impact of technological change, education, law, medicine, and heritage resource management. (Prerequisite: 100B or 200A) (3-0)

### ANTH 312 (formerly 412) (1½) MEDICAL ANTHROPOLOGY

Practices and beliefs of selected societies related to the concept of "health" are described and problems of disease prevention, identification, and treatment in cross cultural situations are examined. Topics covered may include: epidemiology; disease and evolution; and transcultural nursing and psychiatry. (Prerequisite: 100A or 250, and 100B or 200A) (3-0)

### ANTH 316 (formerly 416) (1½) INTRODUCTION TO ANTHROPOLOGICAL RESEARCH: I

Designed to introduce students to research methods suitable for anthropological problems. Emphasis is placed on formulation of researchable anthropological propositions, research design, and elementary techniques of data analysis. (Prerequisite: a grade point average of at least 3.50 for three of 200A, 200B, 240, 250) (3-0)

### ANTH 317 (formerly 417) (1½) INTRODUCTION TO ANTHROPOLOGICAL RESEARCH: II

Formal methods of analysis in Anthropology, especially statistics, problems of validation, and the comparative method. (Prerequisite: a grade of at least C+ for 316 (formerly 416)) (2-2)



**ANTH 321 (3) CULTURES AND PEOPLES OF THE WORLD**

A broad introductory survey of comparative ethnography, including discussion of the major cultural regions of the world and selected examples of societies at various levels of complexity. (*Prerequisite:* At least Third Year standing or 100B) (3-0)

**ANTH 322 (1½) ETHNOLOGY OF NORTH AMERICA**

The major culture areas of aboriginal North America with description and analysis of selected cultures; introduction to problems in the interpretation of North American ethnology. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 323 (1½) ETHNOLOGY OF CIRCUMPOLAR REGION**

The cultures of Arctic and sub-Arctic Eurasia and North America. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 324 (1½) ETHNOLOGY OF MIDDLE AMERICA**

An integrated description and analysis of the cultural history and present day economic, social, political, and religious ways of life of selected Indian and mestizo groups of Mexico and Central America; recent changes and modern trends in cultural development. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 325 (1½) ETHNOLOGY OF SOUTH AMERICA**

An integrated description and analysis of the cultural history and present day economic, social, political, and religious ways of life of selected Indian groups of South America. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 326 (1½) ETHNOLOGY OF OCEANIA: MICRONESIA AND POLYNESIA**

Ethnological description and analysis of the cultures of Micronesia and Polynesia. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 327 (1½) ETHNOLOGY OF OCEANIA: AUSTRALIA AND MELANESIA**

Ethnological description and analysis of the aboriginal peoples and cultures of Australia and Melanesia. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 329 (1½) ETHNOLOGY OF SOUTHEAST ASIA**

An integrated description and analysis of the peoples and cultures of Mainland and Island Southeast Asia. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 330 (1½) ETHNOLOGY OF SOUTH ASIA**

Ethnological description and analysis of the peoples and cultures of the Indian subcontinent. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 332 (1½) ETHNOLOGY OF EUROPE**

Ethnological description and analysis of peoples of Europe. Topics may include: folk cultures, migration, urbanization, industrialization, and the emergence of ethnicity and of nationalist movements. (*Prerequisite:* 100B, or both 200A and 200B, or 321) (3-0)

**ANTH 334 (1½) ETHNOLOGY OF SUB-SAHARAN AFRICA**

A survey of the traditional cultures of sub-Saharan Africa; recent changes and problems of modernization. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 335 (1½) CANADIAN ETHNIC GROUPS**

An anthropological perspective on the ethnic groups of Canada. The groups will be studied in the context of the wider literature of race relations, minority groups, and ethnicity. (*Prerequisite:* 100B, or 200A and 200B, or 321) (3-0)

**ANTH 336 (1½) CONTEMPORARY ABORIGINAL PEOPLES OF CANADA**

Aboriginal peoples in modern Canadian society. Comparison with the situation of other aboriginal peoples in various parts of the world. (*Prerequisite:* 100B, or both 200A and 200B, or 321) (3-0)

**ANTH 339A (1½) ETHNOLOGY OF THE NORTHWEST INTERIOR**

A survey of the groups and cultures of the Plateau culture area and the adjacent portion of the sub-Arctic culture area. (*Prerequisite:* 100B, or both 200A and 200B, or 321) (3-0)

**ANTH 339B (1½) ETHNOLOGY OF THE NORTHWEST COAST**

A survey of groups and cultures of the Northwest Coast culture area. (*Prerequisite:* 100B, or both 200A and 200B, or 321) (3-0)

**ANTH 341A (1½) EARLY STONE AGE SOCIETIES**

A review of the formative phases in the development of prehistoric cultures and societies during the Pleistocene/early Holocene in Africa, Eurasia and Australasia. Archaeological evidence on cultural beginnings, ecology, subsistence systems, technology and social life of early humankind. (*Prerequisite:* 240) (3-0)

**ANTH 341B (1½) EMERGENCE OF CIVILIZATION**

A review of the archaeological record on: the origin of animal/plant husbandry, sedentary village life and pastoralism, technological innovation and social life; of subsequent developments leading to the appearance of the first cities, state institutions and stratified societies in major centres of the Old World. (*Prerequisite:* 240) (3-0)

**ANTH 342 (1½) ARCHAEOLOGY OF PRECOLUMBIAN AMERICA**

A survey of the archaeological record for the development of aboriginal cultures and societies of the New World prior to European colonization, from late Ice Age settlement of North and South America through the appearance of farming villages up to the growth of urban civilizations of middle America and the Andes. (*Prerequisite:* 240) (3-0)

**ANTH 350A (1½) PRIMATOLOGY**

A detailed survey of the field of primatology including taxonomy, genetics, morphology, palaeontology, ecology, zoogeography, growth and behaviour of the primates. (*Prerequisite:* 250) (3-0)

**ANTH 350B (1½) HUMAN PALAEONTOLOGY**

An examination of the fossil evidence for human evolution emphasizing the interpretation and reconstruction of the human lineage. (*Prerequisite:* 250) (3-0)

**ANTH 353 (1½) NUTRITIONAL ANTHROPOLOGY**

A cross cultural examination of the effects of nutrition on past and present human populations. Aspects of this course will include human evolution, growth and development, demography, population dynamics and physical variation. (*Prerequisite:* 250) (3-0)

**ANTH 390 (1½) SELECTED PROBLEMS IN ANTHROPOLOGY**

Presentation of selected problems in Anthropology. Students interested in this course should enquire at Registration when the course is to be offered and what substantive areas are to be studied. Students may enroll in this course in different areas for a maximum of 3 units. (*Prerequisite:* Permission of Department) (3-0)

**ANTH 400A (1½) (formerly part of 400) HISTORY OF ANTHROPOLOGICAL THEORY**

History and development of the major trends in anthropological theory until the mid-twentieth century. (*Prerequisites:* Fourth year standing and a grade point average of at least 3.50 for three of 200A, 200B, 240, 250) (3-0)

**ANTH 400B (1½) (formerly part of 400) CURRENT TRENDS IN ANTHROPOLOGICAL THEORY**

Survey of recent developments in anthropological theory. (*Prerequisites:* Fourth Year standing and a grade point average of at least 3.50 for three of 200A, 200B, 240, 250) (3-0)

**ANTH 401 (1½) CULTURAL ECOLOGY**

Theories concerning the relationship of human groups, culture and environment; cultural systems as the means by which human populations adapt to their environments. (*Prerequisite:* a grade point average of at least 3.50 for 200A and 200B) (3-0)

**ANTH 405 (1½) ECONOMIC ANTHROPOLOGY**

A comparative analysis of the social context of production, distribution and exchange systems. (*Prerequisites:* 200A and 200B) (3-0)

**ANTH 406 (1½) POLITICAL ANTHROPOLOGY**

Comparative analysis of governing institutions in societies ranging from tribal groups to various types of state organizations. In each type of political system, the modes of allocating decision making powers and administrative authority will be examined. (*Prerequisites:* 200A and 200B) (3-0)



**ANTH 407 (1½) SYMBOLIC ANTHROPOLOGY**

The nature of symbolic systems in human societies; material examined includes not only manifestly symbolic systems such as religion and art but also systems of classification in general, particularly those closely related to the social order. (*Prerequisites*: 200A and 200B) (3-0)

**ANTH 418 (1½) CULTURAL AND SOCIAL CHANGE**

Survey of the theories advanced to explain cultural and social change. Special attention will be given to the issues arising from the impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas. (*Prerequisite*: a grade point average of at least 3.50 for 200A and 200B) (3-0)

**ANTH 419 (SOCI 419) (1½) MODERNIZATION AND DEVELOPMENT**

An examination of selected theories and research on development, underdevelopment and dependence in the modern world; examples will be taken from various parts of the world, including Canada. (3-0)

**ANTH 441 (1½) ARCHAEOLOGICAL METHOD AND THEORY**

The strategy of research in archaeology; archaeology as a subdiscipline and its comparison with related fields; the course emphasizes theories of research methodology in archaeology as well as the contribution of archaeology to theories of cultural process. (*Prerequisites*: 240 and pre-

or *corequisite*: 317 or 417 or a course in statistics acceptable to the Department) (3-0)

**ANTH 449 (1½) ARCHAEOLOGY OF THE PACIFIC NORTHWEST**

Intensive study of problems of interpreting Pacific Northwest archaeological data. Field trips will be scheduled. (*Prerequisite*: 240) (2-3)

**ANTH 451 (1½) HUMAN OSTEOLOGY**

This course is designed to familiarize students with theoretical and methodological approaches to the study of human skeletal remains. (*Prerequisite*: 250) (2-3)

**ANTH 453 (1½) POPULATION STRUCTURE AND HUMAN EVOLUTION**

Analysis of the population dynamics of prehistoric and contemporary populations from the perspectives of evolutionary ecology and human sociobiology. (*Prerequisite*: 250) (2-3)

**ANTH 490 (1½-3) DIRECTED STUDIES**

Students may register for this course in the Fourth Year of the Major or Honours Program with permission of the Department and the Instructor. (*Prerequisite*: Fourth Year standing and permission of the Department)

**ANTH 499 (3) HONOURS SEMINAR AND GRADUATING ESSAY**

## ARTS COOPERATIVE EDUCATION PROGRAM

Norah I. McRae, B.A., M.B.A. (Alta.), Coordinator

The Arts Cooperative Education Program is a year round program which, through work terms of employment in a variety of organizations, enables students to combine work experience with an education in the humanities.

To qualify for admission into the Arts Coop Program, a student must be proceeding to an Honours or Major B.A. degree in one or more of the following Departments: Classics, English, French Language and Literature, Germanic Studies, Hispanic and Italian Studies, History, Linguistics, Pacific and Asian Studies, Philosophy, Slavonic Studies and Women's Studies. In addition, a student must be registered in at least fifteen units of course work and must have achieved at least a 5.00 Grade Point Average in first year. A formal interview to determine the student's interests, abilities and aptitudes will be required before admission.

To continue in the program, a student must be a full time student enrolled in a program leading to an Honours or Major B.A. degree in one of the Departments listed in the previous paragraph, and must maintain a G.P.A. of at least 5.50 in the courses in the major area, and at least a 5.00 average overall.

To receive the Coop notation on graduation, a student must complete at least 9 units of approved Arts Coop courses (see below), must complete satisfactorily the Work Term Preparation Seminars prior to the first work term, and must perform satisfactorily in each of at least four Work Terms. Details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

The Arts Coop Program is designed to provide students with an academic background and certain skills appropriate to a wide range of careers. In particular, students will be required to select a program of studies intended to ensure that they

- are capable of clear and precise oral and written communication in English
- acquire some understanding of management practice and the Canadian financial system
- are aware of the Canadian historical and political context
- are aware of the social impact of science and technology, with particular emphasis on computing.

A student's selection of Arts Coop courses must be approved by both the Arts Coop Coordinator and the responsible departmental adviser.

### COURSES

Students must complete a minimum of 9 units, not forming part of the requirements for the student's Major or Honours program. The 9 units should normally be completed by the end of third year and are to be taken as electives, and form part of the 60 units of credit required for graduation. They must be selected from the following list:

|      |     |      |  |
|------|-----|------|--|
| CSC  | 100 | (1½) | Elementary Computing                         |
| COM  | 220 | (1½) | Organizational Behaviour                     |
| ECON | 100 | (1½) | The Canadian Economy — Problems and Policies |
| ENGL | 215 | (1½) | The Writing of Expository Prose              |
| OR   |     |      |  |
| ENGL | 225 | (1½) | Technical Communications: Written and Verbal |
| FA   | 315 | (1½) | Introduction to Canadian Cultural Policy     |
| FA   | 355 | (1½) | Seminar in Arts Management                   |
| HIST | 130 | (3)  | History of Canada                            |
| PHIL | 201 | (1½) | Applied Logic: I                             |
| OR   |     |      |  |
| PHIL | 203 | (1½) | Applied Logic: II                            |
| PHIL | 220 | (1½) | Introduction to Philosophy of Science        |
| POLI | 100 | (3)  | Canadian Government and Politics             |
| OR   |     |      |  |
| POLI | 470 | (3)  | Government in Canada                         |
| WS   | 100 | (1½) | History of Women's Movements                 |

Applications and further information about the Arts Cooperative Education Program may be obtained from the Arts Co-op Coordinator in the Office of Cooperative Education Programs (Room 136, Campus Services Building).

## DEPARTMENT OF BIOCHEMISTRY AND MICROBIOLOGY

Chair of the Department (Appointment pending)

J. Thomas Buckley, B.Sc., Ph.D. (McG.), Professor

Edward E. Ishiguro, B.A., M.A. (San Fran. St. Coll.), Ph.D. (Ill.), Professor

William W. Kay, B.Sc. (Agr.), M.Sc., Ph.D. (Brit. Col.), Professor  
Robert W. Olafson, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Alta.), Professor  
Terry W. Pearson, B.Sc., Ph.D. (Brit. Col.), Professor  
Trevor J. Trust, B.Sc., M.Sc., Ph.D. (Melb.), Professor



Juan Ausio, B.Sc., Ph.D. (Barcelona), Associate Professor  
 Santosh Misra, B.Sc., M.Sc. (Delhi), Ph.D. (McM.), Associate Professor  
 Francis E. Nano, A.B. (Oberlin), M.S., Ph.D. (Ill.), Associate Professor  
 Paul J. Romaniuk, B.Sc., Ph.D. (McM.), Associate Professor  
 Christopher Upton, B.Sc., Ph.D. (Lond.), Assistant Professor  
 Kathleen N. Cliff, B.Sc., M.Sc. (Alta.), Senior Laboratory Instructor  
 Rozanne Poulson, B.Sc., Ph.D. (Wales), Administrative Officer and  
 Adjunct Assistant Professor  
 Glen R. Pryhitka, B.Sc. (Brit. Col.), Senior Laboratory Instructor  
 Jacqueline M. Somers, B.Sc., Ph.D. (Lond.), Cooperative Education  
 Coordinator

#### Visiting, Adjunct and Cross-listed Appointments:

Thomas P. Mommsen, M.Sc., Ph.D. (Freib.), Adjunct Associate Professor (1994-97)

### LIMITATION OF ENROLLMENT

Students are advised that because of limited facilities and staff it may be necessary to limit enrollment in certain Biochemistry and Microbiology courses. Enrollment limits will be imposed where necessary on the basis of facilities available and academic standing in prerequisite courses. However, students are warned that achieving the minimum academic standing outlined in specific course descriptions does not guarantee entry into these courses. The departmental undergraduate adviser should be consulted for more information.

### GRADUATE PROGRAMS

For information on studies leading to the M.Sc. or Ph.D. degrees, see page 299.

### GENERAL, MAJOR, AND HONOURS PROGRAMS

The Department offers Honours and Major programs in Biochemistry or Microbiology. Students seeking careers as professional Biochemists or Microbiologists, or those who wish to continue their studies through graduate school to the M.Sc. and Ph.D. level are advised to take one of the Honours programs. The Major programs may also provide entry to the professions or to graduate school and are suitable for teaching at the secondary school level. The Department also offers a concentration in Biochemistry and Microbiology as part of the B.Sc. and B.A. degree General programs.

### BIOCHEMISTRY AND MICROBIOLOGY PROGRAMS

| General  | Major  | Honours  |
|--|--|--|
| <b>First Year</b>  |  |  |
|  | ENGL 121 (or 115) (1½)   | ENGL 121 (or 115) (1½)   |
|  | ENGL 122 (or 116) (1½)   | ENGL 122 (or 116) (1½)   |
| MATH 100/101 (3)   | MATH 100/101 (3)   | MATH 100/101 (3)   |
| CHEM 100/102 or 101/102 or 140/245 or 102/140 (3)              | CHEM 100/102 or 101/102 or 140/245 or 102/140 (3)              | CHEM 100/102 or 101/102 or 140/245 or 102/140 (3)              |
| *PHYS 112 (3)  | *PHYS 112 (3)  | *PHYS 112 (3)  |
| Other courses (6)  | Other courses (3)  | Other courses (3)  |
| <b>Second Year</b>   |  |  |
| STAT 255/256 (or equivalent), or MATH 200 (or 205) and 201 (3) | STAT 255/256 (or equivalent), or MATH 200 (or 205) and 201 (3) | STAT 255/256 (or equivalent), or MATH 200 (or 205) and 201 (3) |
| CHEM 231 (1½)  | CHEM 231 (1½)  | CHEM 231 (1½)  |
| CHEM 213 (1½)  | CHEM 213 (1½)  | CHEM 213 (1½)  |
| CHEM 235 (1½)  | CHEM 235 (1½)  | CHEM 235 (1½)  |
| BIOC 200 (1½)  | BIOC 200 (1½)  | BIOC 200 (1½)  |
| BIOL 200 (1½)  | BIOL 200 (1½)  | BIOL 200 (1½)  |
| MICR 200 (3)   | MICR 200 (3)   | MICR 200 (3)   |
| Other courses (1½)   | Other courses (1½)   | Other courses (1½)   |

\* See Note 5

| Third and Fourth Years                                | Third Year                                     | Third Year                                     |
|---|--|--|
| BIOC 300 (3)  | CHEM 222 (1½)                                  | CHEM 222 (1½)                                  |
| Six additional units of Biochemistry and Microbiology | CHEM 245 (1½)                                  | CHEM 245 (1½)                                  |
| Microbiology numbered 300                             | BIOC 300 (3)                                   | BIOC 300 (3)                                   |
| and above (6)   | BIOC 301 (1½)                                  | BIOC 301 (1½)                                  |
| Nine units in a second area of concentration (9)      | MICR 301 (1½)                                  | MICR 301 (1½)                                  |
| Other courses (12)                                    | MICR 302 (1½)                                  | MICR 302 (1½)                                  |
|   | Other courses (4½)                             | Other courses (7½)                             |
|   | <b>Fourth Year</b>                             | <b>Fourth Year</b>                             |
|   | CHEM 335/337 or 345/346 (3)                    | CHEM 335/337 or 345/346 (3)                    |
|   | Two of BIOC 401, 403, 404 or 405 (3)           | Two of BIOC 401, 403, 404 or 405 (3)           |
|   | Two of MICR 401, 402, 403, 404, 405 or 407 (3) | Two of MICR 401, 402, 403, 404, 405 or 407 (3) |
|   | BIOC 406 or MICR 406 (3)                       | BIOC 406 or MICR 406 (3)                       |
|   | BIOC 480 or MICR 480 (1½)                      | BIOC 480 or MICR 480 (1½)                      |
|   | Other courses (1½)                             | BIOC 499 or MICR 499 (3)                       |
|   |  | Other courses (1½)                             |

Other courses suggested:

ENGL 200 or higher level courses

A language at the 100 level or higher

MATH 233A, 233C

CSC 110, 115

CHEM 312, 318, 324, 338, 345, or 400 level courses

BIOL 203, 204, 206, 207, 300, 305A, 305B, or 400 level courses

PHYS 214, 215, 216, 217, 316, 317, or 325

BIOC 201

#### Notes

- (1) Proficiency examinations in one or two modern languages are often required in graduate studies, and students planning graduate work are advised to elect one or two courses in French, German, Russian, or another modern language on Departmental recommendation.
- (2) Courses may be taken in different sequences and in different years than indicated provided that the co- and prerequisite requirements are satisfied; the Department should be consulted.
- (3) Directed studies courses are not available to be taken more than once and are normally only available to students with an overall grade point average of at least 3.50.
- (4) Students should consult the Department concerning courses offered in a particular year.
- (5) The Physics requirements may also be satisfied by PHYS 120/220.

### BIOCHEMISTRY OR MICROBIOLOGY AND CHEMISTRY COMBINED MAJOR

Students wishing to obtain a combined major in Biochemistry or Microbiology and Chemistry should take the following program.

| First Year  | Second Year                          |
|---|--------------------------------------|
| CHEM 100A, or 091/101A or 101B, or 140C (1½)        | BIOC 200 (1½)                        |
| CHEM 092/102A, or 102B or 245D (1½)                 | BIOL 200 (1½)                        |
| ENGL 121/122, or 115/116 (3)                        | CHEM 213/222/231/235/245 (7½ or 6*)  |
| MATH 100/101 (3)                                    | MATH 200 (or 205)/201/224            |
| PHYS 112E (3)                                       | 233A/233B/233C (1½)                  |
| Other courses (Electives; may include CHEM 231) (3) | MICR 200 (3)                         |
|   | Other courses (Electives) (0 or 1½*) |



| Third Year                       |      | Fourth Year                             |      |
|----------------------------------|------|---|------|
| BIOC 300                         | (3)  | Two of BIOC 401/403/                    |      |
| BIOC 301                         | (1½) | 404/405                                 | (3)  |
| CHEM 323/324/335/338/<br>345/346 | (9)  | BIOC 406 or MICR 406                    | (3)  |
| MICR 301/302                     | (3)  | BIOC 480 or MICR 480                    | (1½) |
|                                  |      | CHEM 312/433                            | (3)  |
|                                  |      | CHEM 424 or other 400 level             |      |
|                                  |      | Chemistry course with                   |      |
|                                  |      | permission of department                | (1½) |
|                                  |      | Two of MICR 401/402/403/<br>404/405/407 | (3)  |

A For students with Chemistry 11 and Algebra 12 or Mathematics 12 or equivalents

B For students with Chemistry 12 and Algebra 12 or Mathematics 12 or equivalents

C For students with at least "B" standing in Chemistry 12 and Algebra 12

D For students with at least "B" standing in CHEM 140

E The physics requirement may also be satisfied by PHYS 120/220

\*If CHEM 245 completed previously

## HONOURS

Students who wish to be admitted to one of the Honours programs should apply to the Chair of the Department on completion of their second year. The general requirements for admission to the third year of the Honours program are specified above. Normally admission to the Honours program requires at least a second class average in each of the first two undergraduate years. The minimum requirement for admission to the fourth year is a second class average overall in the work of the third year.

A student in the Biochemistry or Microbiology Honours program is required to meet the general regulations of the University on pages 17 to 23 of this Calendar. If a student fails to meet the standards for the Honours degree, while meeting the Major degree requirements, the Department may recommend the appropriate class of Major degree.

## DOUBLE HONOURS

University regulations also apply to students in a Double Honours Program which includes Biochemistry or Microbiology; however as more than 30 units of upper level courses may be taken, the Department requires that, of the upper level courses in Biochemistry and Microbiology, 15 units must be included in the 30 units used to calculate the graduating average and these 15 units must include BIOC or MICR 480 and 499.

## COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Science is described on page 43.

Entry into the Biochemistry and Microbiology Cooperative Program is restricted to students who are enrolled in an Honours or Major program offered by the Department. To qualify for entry and continuation in the Cooperative Program, students must be enrolled on a full time basis and must normally maintain a B average (4.50) in Biochemistry and Microbiology courses and overall. Students are also required to satisfactorily complete four Work Terms. The first Work Term is undertaken in the summer following the second academic year; academic and work terms alternate thereafter. Each Work Term will be recorded on the student's academic record and transcript (as COM, N, or F), and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript. A student may at any time transfer from the Biochemistry and Microbiology Cooperative Program to a regular Biochemistry and Microbiology program.

Applications and further information concerning the Cooperative Education Program in Biochemistry and Microbiology may be obtained from the Department.

## UNDERGRADUATE COURSES

### BIOCHEMISTRY

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session, L = Lab course)

#### BIOC 200 (1½) INTRODUCTORY BIOCHEMISTRY

An introduction to the principles of Biochemistry. Properties of biomolecules, basic enzymology and metabolism. Bioenergetics, nucleic acid structure and synthesis. Protein synthesis. Structure and properties of membranes. (Note: BIOC 200 should be taken in the second term; see BIOC 200) (*Pre- or corequisite*: CHEM 231 or 230) F(3-0)

#### BIOC 201 (1½) INTRODUCTION TO NUTRITIONAL BIOCHEMISTRY

This course will be oriented to students interested in a general understanding of human nutritional needs and the food supplies and procedures available to meet them. Requirements for protein, carbohydrate, fat, vitamins and minerals will be discussed and related to cellular biochemical mechanisms. Energy balance, dieting and world food problems will also be considered. NO(3-0)

#### BIOC 300 (3) GENERAL BIOCHEMISTRY

An intermediate course in Biochemistry. Protein structure, enzyme kinetics, bioenergetics and metabolism. Membrane structure and transport. Metabolic control systems. Synthesis of DNA and RNA, protein synthesis and morphogenesis. (*Prerequisites*: A grade of B- or higher in 200; BIOC 200; recommended *pre- or corequisite*: CHEM 213) Y(3-0)

#### BIOC 301 (1½) BIOCHEMISTRY LABORATORY

An intermediate course in biochemical laboratory techniques. (*Prerequisite*: A grade of B- or higher in 200; BIOC 200; *pre- or corequisite*: 300) LY(0-3)

#### BIOC 401 (1½) NUCLEIC ACIDS

An advanced study of the structures and functions of RNA and DNA. Topics will include protein synthesis in prokaryotes and eukaryotes and the supramolecular organization of chromatin, ribosomes and viruses. (*Prerequisite*: 300, CHEM 213, or permission of the Department) S(3-0)

#### BIOC 403 (formerly part of 402) (1½) LIPIDS AND MEMBRANES

The molecular properties of the various classes of lipids and glycolipids, as well as their biosynthesis and regulation, will be considered. The supramolecular structure, function and assembly of biological membranes will constitute the major content of the course. The course will consist of formal lectures in addition to required reading and brief seminars by the students. (*Prerequisites*: 300 and CHEM 213, or permission of the Department) S(3-0)

#### BIOC 404 (formerly part of 402) (1½) PROTEINS

Detailed examination of protein structure emphasizing techniques for isolation, characterization, chemical modification and synthesis of proteins and peptides. The course will consist of formal lectures in addition to required readings and brief seminars by the students. (*Prerequisites*: 300 and CHEM 213, or permission of the Department) F(3-0)

#### BIOC 405 (MICR 405) (1½) MOLECULAR BIOTECHNOLOGY

A detailed consideration of recent advances in the molecular basis for biotechnology. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. (*Prerequisites*: 300; MICR 200) NO(3-0)

#### BIOC 406 (3) ADVANCED BIOCHEMISTRY LABORATORY

An advanced laboratory in biochemical and molecular biological techniques. (*Prerequisites*: 300, 301, MICR 301, and MICR 302) (Enrollment is limited by available equipment and facilities, and admittance will be based on relative academic standing in 300, MICR 301, and MICR 302) (Credit will not be given for both 406 and MICR 406) LY(0-5)

#### BIOC 470 (1½ or 3) DIRECTED STUDIES IN BIOCHEMISTRY Y



**BIOC 480 (1½) SEMINAR**

Seminars are presented weekly by invited speakers, Department members and all students in the fourth year of the Major and Honours programs. Students are required to submit two literature research papers of up to 3,000 words each as well as condensed abstracts and to deliver two oral presentations. Attendance and participation in either BIOC 480 or MICR 480 is required of all students. (Credit will not be given for both BIOC 480 and MICR 480) (*Prerequisites*: 300 and MICR 301 and 302) Y(2-0)

**BIOC 499 (3) UNDERGRADUATE THESIS**

Research under the direction of a faculty member. Open to Honours students only. (Credit will not be given for both BIOC 499 and MICR 499) Y

**MICROBIOLOGY****MICR 200 (3) INTRODUCTORY MICROBIOLOGY**

This course is designed to provide a broad introduction to the field of microbiology. Basic principles in the following areas will be covered: prokaryotic cell structure and function; physiology and growth of microorganisms with an emphasis on diversity; virology; microbial genetics; immunology; medical microbiology; applied microbiology; microbial ecology. (Degree credit will not normally be counted for both 101 and 200) (*Prerequisite*: At least Second Year standing or permission of the Department) Y(2-2)

**MICR 301 (1½) MICROBIAL PATHOGENESIS**

Bacterial pathogens; emphasis on molecular mechanisms of pathogenesis including antigenic variation, host cell parasitism, evasion of host immune defences, and mimicry of eukaryotic structures. (*Prerequisite*: 302; *pre- or corequisite*: BIOC 300, or permission of the Department). SK(2-3)

**MICR 302 (1½) MICROBIAL GENETICS**

Molecular basis for mutation; genetic recombination; mechanisms of gene transfer; principles of genetic and physical mapping of genomes; strategies for analysis of gene structure, function, and expression. (*Prerequisite*: 200; *pre- or corequisite*: BIOC 300 or permission of the Department) F(2-3)

**MICR 401 (formerly part of 400) (1½) MOLECULAR PHYSIOLOGY**

An advanced consideration of the molecular aspects of microbial cell structure and growth. Emphasis will be given to the coordination of microbial catabolism, bioenergetics and biosynthesis and cell assembly. The course will consist of formal lectures with additional literature reading and brief seminars by students. (*Prerequisites*: 302 and BIOC 300, or permission of Department) NO(3-0)

**MICR 402 (formerly part of 400) (1½) VIROLOGY**

An advanced consideration of the molecular aspects of viruses. Emphasis will be placed on the animal viruses with respect to: infection process; replication cycle; interactions with the host cell; mechanisms

of pathogenicity; vaccines. The course consists of lectures with additional literature reading and brief seminars by students. (*Prerequisites*: 200 and BIOC 300, or permission of the Department) F(3-0)

**MICR 403 (formerly part of 400) (1½) IMMUNOLOGY**

The generation of antibody diversity; immune effector mechanisms and their regulation; immunological principles as applied to research and medicine. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. (*Prerequisites*: 200 and BIOC 300) S(3-0)

**MICR 404 (1½) MOLECULAR PATHOGENICITY**

A detailed consideration of recent advances in microbial pathogenesis. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. (*Prerequisite*: 301, or permission of the Department) NO(3-0)

**MICR 405 (BIOC 405) (1½) MOLECULAR BIOTECHNOLOGY**

A detailed consideration of recent advances in the molecular basis for biotechnology. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. (*Prerequisites*: 200; BIOC 300) NO(3-0)

**MICR 406 (3) ADVANCED MICROBIOLOGY LABORATORY**

An advanced laboratory in microbiological and molecular biological techniques. (*Prerequisites*: 301, 302, BIOC 300 and BIOC 301) (Enrollment is limited by available equipment and facilities; and admittance will be based on relative academic standing in 301, 302, and BIOC 300) (Credit will not be given for both 406 and BIOC 406) LY(0-5)

**MICR 407 (1½) MOLECULAR MICROBIOLOGY**

Selected topics in the molecular aspects of Microbiology. May be taken more than once in different topics to a maximum of 6 units. NO(3-0)

**MICR 470 (1½ or 3) DIRECTED STUDIES IN MICROBIOLOGY Y****MICR 480 (1½) SEMINAR**

Seminars are presented weekly by invited speakers, Department members and all students in the fourth year of the Major and Honours programs. Students are required to submit two literature research papers of up to 3,000 words each as well as condensed abstracts and to deliver two oral presentations. Attendance and participation in either BIOC 480 or MICR 480 is required of all students. (Credit will not be given for both BIOC 480 and MICR 480) (*Prerequisites*: 301, 302 and BIOC 300) Y(2-0)

**MICR 499 (3) UNDERGRADUATE THESIS**

Research under the direction of a faculty member. Open to Honours students only. (Credit will not be given for both BIOC 499 and MICR 499) Y

**DEPARTMENT OF BIOLOGY**

Patrick T. Gregory, B.Sc. (Tor.), M.Sc., Ph.D. (Man.), Professor and Chair of the Department

Michael J. Ashwood-Smith, B.Sc., M.Sc. (Durh.), Ph.D. (Lond.), Professor

Alan P. Austin, B.Sc., Ph.D. (Wales), Professor

Robert D. Burke, B.Sc., Ph.D. (Alta.), Professor

Derek V. Ellis, B.Sc. (Edin.), M.Sc., Ph.D. (McG.), Professor

Barry W. Glickman, B.Sc., M.Sc. (McG.), Ph.D. (Leiden), Professor

John N. Owens, B.S. (Portland St.), M.Sc., Ph.D. (Ore. St.), F.R.S.C., Professor

Robert G.B. Reid, B.Sc., Ph.D. (Glas.), Professor

Richard A. Ring, B.Sc., Ph.D. (Glas.), Professor

Nancy M. Sherwood, B.S. (Ore.), M.A., Ph.D. (Calif. — Berk.), F.R.S.C., Professor

Verena J. Tunncliffe, B.Sc. (McM.), M.Phil., Ph.D. (Yale), F.R.S.C., Professor

Geraldine A. Allen, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Ore. St.), Associate Professor and Curator of the Herbarium

David J. Ballantyne, B.Com. (Brit. Col.), M.S. (Wash. St.), Ph.D. (Maryland), Associate Professor

Craig W. Hawryshyn, B.Sc. (Man.), M.Sc. (Alta.), Ph.D. (Wat.), Associate Professor

Louis A. Hobson, B.S. (Humboldt St. Coll.), M.S., Ph.D. (Wash.), Associate Professor

Jack L. Littlepage, B.A. (San Diego St. Coll.), Ph.D. (Stan.), Associate Professor

Dorothy H. Paul, B.A. (Radcliffe), D.E.S. (Marseille), Ph.D. (Stan.), Associate Professor

Patrick von Aderkas, B.Sc. (Guelph), Ph.D. (Manc.), Associate Professor

Francis Y.M. Choy, B.Sc. (Man.), M.Sc., Ph.D. (N. Dakota), Assistant Professor



Barbara J. Hawkins, B.S.F. (Brit. Col.), Ph.D. (Cant.), Assistant Professor  
 William E. Hintz, B.Sc. (Car.), M.Sc., Ph.D. (Tor.), Assistant Professor  
 Benjamin F. Koop, B.S., M.S. (Texas Tech.), Ph.D. (Wayne St.), Assistant Professor  
 David B. Levin, B.Es. (Wat.), M.Sc. (Guelph), Ph.D. (McG.), Assistant Professor (NSERC Industrial Chair)  
 Nigel J. Livingston, B.Sc. (Nott.), M.Sc. (Guelph), Ph.D. (Brit. Col.), Assistant Professor  
 Hamish D.W. Bridgman, C.D., B.Sc. (U. of Vic.), B.A., M.A. (Cantab.), Administrative Officer  
 Anne Cobley, B.Sc. (Sask.), M.Sc. (Calg.), Senior Laboratory Instructor  
 A. Cathryn Corbett, B.Sc. (U. of Vic.), M.Sc. (Ore.), Cooperative Education Coordinator  
 Yousuf A. Ebrahim, M.Sc. (York), Senior Laboratory Instructor  
 Beverley L. Glover, B.Sc. (U. of Vic.), M.Sc. (Guelph), Senior Laboratory Instructor  
 Thomas A. Gore, Senior Scientific Assistant  
 Donal N. Horn, Master, Marine Sciences Vessel  
 Anne Parkinson, B.Sc., M.Sc. (U. of Vic.), Cooperative Education Coordinator  
 Chaman L. Singla, B.Sc., M.Sc. (Panjab), Ph.D. (U. of Vic.), Senior Scientific Assistant  
 G. Beth Stevenson, B.A., M.A. (Brit. Col.), Senior Laboratory Instructor  
 Ian G. Thornton, B.Sc., M.Sc. (U. of Vic.), Senior Laboratory Instructor  
 Neville Winchester, B.Sc., M.Sc. (U. of Vic.), Senior Laboratory Instructor

#### Visiting, Adjunct and Cross-listed Appointments:

Arthur T. Bergerud, B.Sc. (Ore. St.), M.Sc. (Wis.), Ph.D. (Brit. Col.), Adjunct Professor (1993-95)  
 David A. Boag, B.Sc., M.Sc. (Alta.), Ph.D. (Wash.), Adjunct Professor (1993-95)  
 Bryce Kendrick, B.Sc., Ph.D., D.Sc. (Liv.), Adjunct Professor (1994-96)  
 Job Kuijt, B.A. (Brit. Col.), M.A., Ph.D. (Calif.-Berk.), Adjunct Professor (1993-95)  
 Patrick M.J. MacLeod, B.Sc., M.D. (Brit. Col.), Adjunct Professor (1994-96)  
 Thomas E. Reimchen, B.Sc. (Alta.), Ph.D. (Liv.), Adjunct Professor (1994-96)  
 Alan J. Southward, B.Sc., Ph.D., D.Sc. (Liv.), Adjunct Professor (1993-95)  
 Andrew N. Spencer, B.Sc. (Lond.), Ph.D. (U. of Vic.), Adjunct Professor (1993-95)  
 Robert Van Den Driessche, B.Sc. (N. Wales), M.Sc. (Tor.), Ph.D. (Wales), Adjunct Professor (1994-96)  
 Richard F. Addison, B.Sc., Ph.D. (Queen's), Adjunct Associate Professor (1994-96)  
 Hugh J. Barclay, B.Sc. (Brit. Col.), M.Sc., Ph.D. (U. of Vic.), Adjunct Associate Professor (1994-96)  
 William R. Bates, B.Sc. (Guelph), M.Sc. (W. Ont.), Ph.D. (Texas), Adjunct Associate Professor (1994-96)  
 Alan E. Burger, B.Sc., B.Sc., Ph.D. (Cape T.), Adjunct Associate Professor (1994-95)  
 Donald S. Eastman, B.Sc. (Brit. Col.), M.Sc. (Aberd.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1993-95)  
 Abul K.M. Ekramoddoullah, B.Sc., M.Sc. (Dhaka), Ph.D., (McG.), Adjunct Associate Professor (1994-96)  
 Richard J. Hebda, B.Sc. (McM.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1993-95)  
 Edward H. Miller, B.Sc. (Alta.), M.Sc. (Cantab.), Ph.D. (Dal.), Adjunct Associate Professor (1994-96)  
 Imre S. Otvos, B.S.F. (Brit. Col.), M.S., Ph.D. (Calif., Berk.), Adjunct Associate Professor (1993-95)  
 George S. Puritch, B.Sc. (U. of Vic.), M.S. (Mass.), Ph.D. (Aberd.), Adjunct Associate Professor (1993-95)  
 Joseph A. Antos, B.S. (N. Ill.), M.A. (Mon.), Ph.D. (Ore. St.), Adjunct Assistant Professor (1993-95)  
 Robin W. Baird, B.Sc. (U. of Vic.), Ph.D. (S. Fraser), Adjunct Assistant Professor (1994-96)  
 Pierre Charest, B.Sc., M.Sc. (Laval), Ph.D. (Car.), Adjunct Assistant Professor (1993-95)  
 Johan De Boer, Kandidaats Drs.Ex. (Groningen), Ph.D. (Amsterdam), Adjunct Assistant Professor (1993-95)

William D. Eaton, B.A., M.A. (San Jose St.), Ph.D. (Calif., Davis), Adjunct Assistant Professor (1994-96)  
 Delano James, B.Sc. (Bran.), Ph.D. (W. Indies), Adjunct Assistant Professor (1994-96)  
 John N. King, B.Sc. (Alta.), M.Phil. (Edin.), Ph.D. (Alta.), Adjunct Assistant Professor (1994-96)  
 Wolfgang Kusser, B.A., Ph.D. (Munich), Adjunct Assistant Professor (1994-96)  
 Alan K. Mitchell, B.Sc., M.Sc. (U. of Vic.), Ph.D. (Wash.), Adjunct Assistant Professor (1993-95)  
 Louise Page, B.Sc., M.Sc. (Alta.), Ph.D. (U. of Vic.), Adjunct Assistant Professor (1994-96)  
 Michael Stoeck, B.Sc., M.Sc. (Lake.), Ph.D. (Tor.), Adjunct Assistant Professor (1993-95)  
 John A. Trofymow, B.Sc. (Leth.), M.Sc., Ph.D. (Colo. State), Adjunct Assistant Professor (1993-95)  
 Johannes P. Van Netten, B.Sc., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1994-96)  
 Eleanor White, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Swedish U. of Agric. Sci.), Adjunct Assistant Professor (1994-96)  
 Christopher C. Wood, B.Sc. (S. Fraser), Ph.D. (Brit. Col.), Adjunct Assistant Professor (1994-96)

## GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 301.

### GENERAL, MAJOR AND HONOURS PROGRAMS

Students have the opportunity to study biology at any of three levels of concentration, General, Major or Honours. B.Sc. Honours and Major programs are intended for those planning to become professional biologists. Both require a core of biology courses, corequisite courses in the other sciences and a selection of upper level courses suited to the interests of individual students. The Honours program requires undergraduates to undertake a research project including the writing and defence of an Honours thesis. Students intending to pursue research or continue their studies for M.Sc. or Ph.D. degrees should consider the Honours program. The distinctive character of B.Sc. or B.A. General programs is the breadth of course options possible. Students in these programs may wish to combine a concentration in Biology with one in another science area (B.Sc.) or an Arts area (B.A.). Such interdisciplinary programs may be advantageous to students considering a postgraduate degree in the health sciences or education.

### COOPERATIVE EDUCATION PROGRAM

Biology students registered in Major and Honours programs may wish to combine their academic programs with relevant and productive work experience in industry, business and government. The general concept and requirements of the Cooperative Education Program are given on page 38 and specifics for the Faculty of Arts and Science are described on page 43.

Entry to the Biology Cooperative Program is restricted to students enrolled in an Honours or Major program in Biology and attending the University on a full time basis. To qualify for entry and continuation in the Cooperative Program a student must normally maintain a second class average in Biology courses and overall. In addition to academic grades, acceptance will also be based upon individual interest, abilities and aptitudes, and a formal interview. A student is required to complete satisfactorily at least four Work Terms, each of which will be recorded on the student's academic record and transcript (as COM, N or F). Details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript. The first Work Term (following first year) is optional, but students are required to complete four of the following five scheduled Work Terms. A student may at any time transfer from the Biology Cooperative Program to a regular Biology Program.

Students transferring from other postsecondary institutions may apply to enter the Coop Program when applying for admission to the University of Victoria. The Biology Department does not normally permit students to gain credit by Work Term Challenge. Coop students interrupting their academic or Work Term program may apply for reinstatement in the Coop Program upon return to the University. Readmission is not guaranteed.

Applications and further information concerning the Cooperative Program in Biology may be obtained from the Department.



## BIOLOGY PROGRAMS

## 3.0 B.Sc. HONOURS

|   |       |
|---|-------|
| <b>Core</b>   |       |
| Program must contain:   |       |
| BIOL 210  | (1½)  |
| BIOL 215  | (1½)  |
| BIOL 220  | (1½)  |
| BIOL 225  | (1½)  |
| BIOL 230  | (1½)  |
| TOTAL   | (7½)  |
| Minimum of 15 upper level Biology units chosen by the student | (15)  |
| BIOL 460  | (1)   |
| BIOL 499  | (3)   |
| Minimum Biology units   | (26½) |

## Corequisites

Honours students must complete 19½ units of corequisites. Science Electives are any courses offered by the Depts. of Biochemistry and Microbiology, Chemistry, Computer Science, Mathematics and Statistics, Physics and Astronomy or the School of Earth and Ocean Sciences.

Program must contain:

|                         |             |
|-------------------------|-------------|
| BIOC 200                | (1½)        |
| STAT 255 or 260         | (1½)        |
| CHEM 101/102 or 140/102 | (3)         |
| CHEM 231/232 or 231/235 | (3)         |
| PHYS 102 or 112         | (3)         |
| MATH 100/101 or 102/151 | (3)         |
| Science Electives       | (4½)        |
| TOTAL                   | (19½)       |
| <b>Free Electives</b>   | <b>(15)</b> |
| TOTAL UNITS             | (61)        |

## 4.0 B.Sc. GENERAL

Any three of:

|  |       |
|--|-------|
| BIOL 210, 215, 220, 225 or 230                                       | (4½)  |
| BIOL courses numbered 200 or above including 9 units of 300 or above | (10½) |
| Total BIOL   | (15)  |

## Corequisites

|   |      |
|---|------|
| PHYS 102 or 112   | (3)  |
| CHEM 100 or 101 or 140  | (1½) |
| CHEM 102 or 231   | (1½) |
| MATH 100/101 or 102/151   | (3)  |
| Electives (including 9 units of 300 or above in second area of concentration) | (36) |
| Total   | (60) |

5.0 The following table outlines suggested timetables for Honours, Major and General Programs in Biology. Students are encouraged to seek advice from the Undergraduate Advisor or Faculty.

| Honours              | Major                | General           |
|----------------------|----------------------|-------------------|
| <b>First year</b>    | <b>First year</b>    | <b>First year</b> |
| CHEM (3)             | CHEM (3)             | CHEM (3)          |
| PHYS (3)             | PHYS (3)             | PHYS (3)          |
| MATH (3)             | MATH (3)             | MATH (3)          |
| BIOL 210 (1½)        | BIOL 210 (1½)        | 1 of BIOL 210     |
| BIOL 215 or 220 (1½) | BIOL 215 or 220 (1½) | 215 or 220 (1½)   |
| Electives (3)        | Electives (3)        | Electives (4½)    |
| (15)                 | (15)                 | (15)              |

## B.Sc. MAJOR

|   |       |
|---|-------|
| <b>Core</b>   |       |
| Program must contain:   |       |
| BIOL 210  | (1½)  |
| BIOL 215  | (1½)  |
| BIOL 220  | (1½)  |
| BIOL 225  | (1½)  |
| BIOL 230  | (1½)  |
| TOTAL   | (7½)  |
| Minimum of 15 upper level Biology units chosen by the student | (15)  |
| Minimum Biology units   | (22½) |

## Corequisites

Major students must complete 19½ units of corequisites. Science Electives are any courses offered by the Depts. of Biochemistry and Microbiology, Chemistry, Computer Science, Mathematics and Statistics, Physics and Astronomy or the School of Earth and Ocean Sciences.

Program must contain:

|                         |             |
|-------------------------|-------------|
| BIOC 200                | (1½)        |
| STAT 255 or 260         | (1½)        |
| CHEM 101/102 or 140/102 | (3)         |
| CHEM 231/232 or 231/235 | (3)         |
| PHYS 102 or 112         | (3)         |
| MATH 100/101 or 102/151 | (3)         |
| Science Electives       | (4½)        |
| TOTAL                   | (19½)       |
| <b>Free Electives</b>   | <b>(18)</b> |
| TOTAL UNITS             | (60)        |

## B.A. GENERAL

Any three of:

|  |       |
|--|-------|
| BIOL 210, 215, 220, 225 or 230                                       | (4½)  |
| BIOL courses numbered 200 or above including 9 units of 300 or above | (10½) |
| Total BIOL   | (15)  |

## Corequisites

|   |      |
|---|------|
| CHEM 100 or 101 or 140  | (1½) |
| CHEM 102 or 231   | (1½) |
| Electives (including 9 units of 300 or above in second area of concentration) | (42) |
| Total   | (60) |

## Second year

|                      |                      |  |
|----------------------|----------------------|--|
| CHEM (3)             | CHEM (3)             | 2 of BIOL 210, 215, 220, 225, or 230 (3) |
| BIOL 215 or 220 (1½) | BIOL 215 or 220 (1½) | Electives (12)                           |
| BIOL 225 (1½)        | BIOL 225 (1½)        |  |
| BIOL 230 (1½)        | BIOL 230 (1½)        |  |
| BIOC 200 (1½)        | BIOC 200 (1½)        |  |
| STAT 255 (1½)        | STAT 255 (1½)        |  |
| Sci Elective (1½)    | Sci Elective (1½)    |  |
| Electives (3)        | Electives (3)        |  |
| (15)                 | (15)                 | (15)                                     |

## Third year

|                   |                   |                        |
|-------------------|-------------------|------------------------|
| BIOL Elective (9) | BIOL Elective (9) | BIOL 200 or above* (6) |
| Sci Elective (3)  | Sci Elective (3)  | Electives** (9)        |
| Electives (3)     | Electives (3)     | (15)                   |
| (15)              | (15)              | (15)                   |

## Fourth year

|                   |                   |                         |
|-------------------|-------------------|-------------------------|
| BIOL 460 (1)      | BIOL Elective (6) | BIOL 200 or above* (4½) |
| BIOL 499 (3)      | Electives (9)     | Electives** (10½)       |
| BIOL Elective (9) |                   |                         |
| Electives (3)     | (15)              | (15)                    |
| (16)              |                   |                         |

\*These 10½ units must include 9 units of 300 or above.

\*\*These 19½ units must include 9 units in second area of concentration.

## 6.0 NOTES

6.1 Biology 11/12 are normally required for entry into Major, Honours, and General programs. Students without Biology 11/12 are required to take BIOL 150A/B to enter Majors, Honours and General programs.

6.2 Major and Honours students are expected to participate fully in all aspects of laboratory work including handling live and preserved organisms. Laboratory work using animals is reviewed annually by the University of Victoria Animal Care Committee and complies with guidelines established by the Canadian Council on Animal Care. Students who are unwilling to use animals and plants for educational purposes will not normally be able to complete a Major or Honours program. The General program provides an alternative for students in such a position. Students who have ethical or health concerns that interfere with normal program requirements should write to the Chair of the Biology Department. This should be done at least 6 weeks before the beginning of the term in which the course of concern is being offered.

6.3 Students from outside the Dept. of Biology wanting to take BIOL courses are encouraged to take BIOL 150A/B and as many core courses as possible (210, 215, 220, 225, 230). If students want to take upper level courses, they should contact the undergraduate advisor or instructor to determine which core courses are most suitable as prerequisites.

6.4 Students considering going on to professional schools, e.g. Medicine, Dentistry, Veterinary Science, etc. should include those Science, Math and English courses prerequisite to entry into professional programs. Three units of PHYS are required for most first year preprofessional programs. Students contemplating entry into medicine after the third year should consult with the Department.

6.5 Students considering a teaching career are advised to consider the following programs: for Senior Secondary level, a B.Sc. Major or Honours; for Junior Secondary School and Elementary level, a B.Sc. or B.A. General Program. For teacher certification, students should consult the Faculty of Education.

6.6 Because of the importance of biometrics in most biological work, students in biology programs should consider taking additional STAT courses. It is further recommended that students take CSC 200 as early as possible.

6.7 Students may be required to meet part of the expenses involved in required field trips.

6.8 For information on a B.Sc. in Biology at Malaspina University-College see page 162.

## HONOURS

Honours students should complete the program of required courses and Biology electives as described for the Major, and in addition should take 460 (1) and 499 (3) in their fourth year. Of the remaining 9 units to complete the 61 unit degree requirement, at least 3 units must be from



an additional course(s) in Biology chosen in consultation with the Department.

Prospective Honours students should first discuss their proposed thesis research with a faculty member and obtain the member's consent to serve as thesis supervisor. They should then apply in writing to the Chair of the Department for admission to the Honours program before May 1 in the third year of studies. However, under special circumstances applications will be accepted up to the end of fall registration in the fourth year of studies. The completed thesis will be examined by a small committee including the supervisor. Applicants should have and maintain a grade point average of at least 6.00 in all Department courses.

First Class Honours will be awarded to students obtaining a first class average in 300 and 400 level courses, and must include first class standing in 499. Second Class Honours will be awarded to students obtaining a second class average in 300 and 400 level courses, and must include at least second class standing in 499. A student who obtains a first class average in the 300 and 400 level courses but second class standing in 499 will have the option of receiving a B.Sc. with a First Class Major in Biology or Second Class Honours. A student who achieves lower than second class standing in 499 will graduate under the Major program provided the student satisfies other requirements for the degree.

The submission date for the thesis is the last day of lectures.

Proficiency in more than one language is often required in graduate studies. Students planning graduate work are encouraged to elect one or two language courses.

## BIOLOGY COURSES FOR NONBIOLOGISTS

The Biology Department offers several courses for students not undertaking an undergraduate program in Biology. These courses cover areas of Biology of general interest and relevance. Courses in this category include 313, 334, 338 and 400. Certain other courses may be taken with permission of instructor.

## UNDERGRADUATE COURSES

### BIOLOGY

Students should consult the Department concerning courses offered in a particular year.

Major and Honours students are normally required to complete BIOL 210, 215, 220, 225, and 230 before undertaking courses numbered 300 or above.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., M = May-June, NO = Not offered, this session)

#### BIOL 150A (1½) MODERN BIOLOGY

An introduction to biological science, emphasizing the diversity of living organisms and the evolutionary and ecological principles underlying this diversity. Topics include the history of life on earth, mechanisms of evolution, and the ecology of populations, communities and ecosystems (including human ecology). (150A and 150B may be taken in any order) (Major and Honours students see 6.0 Notes, above)

F(3-3)

#### BIOL 150B (1½) MODERN BIOLOGY

An introduction to biological science, emphasizing cellular and physiological processes. Topics include principles of genetics, cell biology, plant physiology and animal physiology. (150A and 150B may be taken in any order) (Major and Honours students see 6.0 Notes, above)

S(3-3)

#### BIOL 210 (1½) EVOLUTION AND BIOLOGICAL DIVERSITY

An introduction to the principles and processes of evolution and the diversity of life. Natural selection, genetic basis of variation, speciation, evolutionary change, and evidence of evolution; origin, evolution, and adaptive radiation of major groups of plants and animals including the fungi and protists. Practicals include handling of live and preserved specimens. (Prerequisites: Biology 11/12 or 150A/B or equivalent)

F(3-3)

#### BIOL 215 (1½) PRINCIPLES OF ECOLOGY

An introduction to factors controlling the distribution and abundance of organisms. Physical environments of organisms; biotic environments and interactions among species; factors influencing population growth; behavioural ecology; structure and function of communities; suc-

sion; stability and disturbance; diversity; trophic levels, food webs, and energy flow; nutrient cycling; biomes. Credit will not be given for both 215 and 306. (Prerequisites: Biology 11/12 or 150A/B or equivalent)

FS(3-3)

#### BIOL 220 (1½) PRINCIPLES OF PHYSIOLOGY

An introduction to the structure/function relationships of plants and animals at the tissue, organ and whole organism levels. Plant and animal tissues and cells, transport processes in plants, plant growth, photosynthesis, control mechanisms in plants and animals, water balance, nutrition, circulation, neural functions, hormonal secretion and gas exchange in animals. Practicals include the study of tissues and live animals and plants. Credit will not be given for both 220 and any of 305A or B and 331A or B. (Prerequisite: Biology 11/12 or 150A/B or equivalent)

S(3-3)

#### BIOL 225 (1½) CELL STRUCTURE AND FUNCTION

An introduction to the study of structure/function relationships at the cellular level. Evolution of cells, structural components of cells, cellular compartmentalization, energy conservation, cell signalling, cell growth, and cellular mechanisms of plant and animal development. Credit will not be given for both 225 and 200. (Prerequisites: Biology 11/12 and second year standing)

F(3-3)

#### BIOL 230 (1½) PRINCIPLES OF GENETICS

Introduction to principles of inheritance. Classical genetic theory; meiosis, mitosis, recombination, population genetics and evolution, genotype, phenotype, random assortment, dominance, DNA structure, function, replication and molecular basis of inheritance. RNA and protein synthesis, regulation of transcription and gene organization. Introduction to DNA technologies. Credit will not be given for both 230 and 300. (Prerequisite: 225; corequisite: BIOC 200)

FS(3-3)

#### BIOL 251 (formerly 304) (1½, formerly 3) BIOMETRICS

Introduction to experimental design, sampling, and data analysis for biologists. Topics include chi-square analyses, analysis of variance designs, regression and correlation, and nonparametric tests; the course deals mainly with univariate statistics, but multivariate methods are discussed briefly. Laboratory classes include tutorials and projects involving planning and carrying out surveys or experiments designed to test specific hypotheses; take home problem sets are also assigned. (Prerequisite: STAT 255 or equivalent) (Credit can be obtained for only one of BIOL 251 and STAT 256 or 261) (See Credit Limit, page 18)

NO(2-3-1)

#### BIOL 307 (1½) CHORDATE ZOOLOGY

Comparative anatomy of the chordates. Chordate diversity, evolution of organ systems. Laboratory work involves dissections of representative specimens; a term report is required. (Prerequisite: completion of core)

S(3-3)

#### BIOL 309 (1½) DEVELOPMENTAL BIOLOGY

The development processes of animals, emphasizing the principles and major mechanisms regulating morphogenesis and cellular differentiation. Laboratories will introduce students to observations and manipulations of embryos of a range of organisms. (Prerequisites: Completion of core and 360, 361 or 200, 300, and 308)

S(3-3)

#### BIOL 311A (1½) PHYSICAL AND GEOLOGICAL OCEANOGRAPHY

An introduction to atmospheric and oceanic heat budgets, distributions of temperature, salinity and density in the oceans, ocean circulation, ocean waves, interactions between waves and coastal margins and the structure and evolution of sea floors. Participation in one single-day cruise is expected. (Prerequisites: Completion of core, completion of MATH and PHYS program requirements)

F(2-3)

#### BIOL 311B (1½) CHEMICAL AND BIOLOGICAL OCEANOGRAPHY

An introduction to the effects of geological and biological processes on the chemical composition of seawater and to the dynamics of phytoplankton and zooplankton populations in the sea based on their ecological, physiological and behavioural characteristics. Participation in two single-day cruises is expected. (Prerequisites: Completion of core, and CHEM program requirements. BIOL 311A recommended)

S(2-3)



**BIOL 312 (1½) INTRODUCTORY ENTOMOLOGY**

An introduction to the morphology, physiology, taxonomy and natural history of insects. A collection of 75 species of insects will be required. The specimens should be mounted, identified and presented as a museum collection. Obtain instructions in the summer preceding the course. Field collecting trips will be arranged. (Students proceeding in Entomology are advised to take this course in conjunction with 313.) (Pre- or corequisite: 206 or 321) NO(2-3)

**BIOL 313 (1½) ECONOMIC ENTOMOLOGY**

A study of our greatest competitors for food and resources. Insects and arachnids of medical, household, stored products, horticultural, agricultural and forestry importance will be discussed. The course will deal to a great extent with the variety of measures available for pest control. (Prerequisite: 150 or written permission of instructor) NO(2-2)

**BIOL 314A (1½) MARINE FIELD BIOLOGY**

Introduction to methods and concepts of marine biological investigation. Description and comparison of species associations, spatial and temporal distribution patterns, food networks, life history strategies. Field emphasis will be on rocky shore, algal, forest, and infaunal ecosystems. The laboratory will emphasize accuracy in species identification. (Prerequisite: completion of core and 206 or 321) M(2-3)

**BIOL 314B (1½) MARINE FIELD BIOLOGY**

Introduction to methods and concepts of marine biological investigation. Description and comparison of species associations, spatial and temporal distribution patterns, food networks, species life strategies, and assessment of environmental impact. Field emphasis will be on beach and infaunal ecosystems. The laboratory will emphasize quantitative procedures, sampling design and numerical analysis. (Pre- or corequisites: 321 or 206; completion of STAT program requirements) NO(2-3)

**BIOL 318 (1½) SYSTEMATICS OF FLOWERING PLANTS**

An introduction to systematics of angiosperms, including principles of classification; rules of nomenclature; identification and use of keys; the major groups of flowering plants; species concepts; and experimental approaches to systematics, with examples from selected groups. A collection of 25 properly identified plants is required, preferably made during the preceding summer. Contact instructor for details and collecting equipment as early as possible. (Prerequisite: completion of core or 204 or permission of the instructor) S(2-3)

**BIOL 319 (1½) MARINE ECOLOGY**

The agents that control the distribution of organisms and structure of marine communities, including: the influence of environmental conditions on plant and animal populations, organic matter and nutrient cycling, consumer dynamics and competition, community stability and diversity. (Prerequisites: 323 or 203, 321 or 206, 330 or 306) S(2-3)

**BIOL 321 (1½) SURVEY OF INVERTEBRATES**

Invertebrate diversity in an evolutionary perspective. Taxonomy, morphology, life histories and phylogeny. Practicals include study of live and preserved specimens. Credit will not be given for both 321 and 206. (Prerequisite: Completion of core) F(3-3)

**BIOL 322 (1½) ADAPTATIONS OF INVERTEBRATES**

Adaptations and principles of functional morphology; feeding and nutrition, respiration, excretion, reproduction, nervous coordination and behaviour. Individual projects form the basis of laboratory exercises, and include the study of live and preserved specimens. Credit will not be given for both 322 and either 301A or B. (Prerequisite: 321) NO(3-3)

**BIOL 323 (1½) ALGAE AND FUNGI**

The origins, classification, evolution, genetics, physiology, ecology, and economic uses of the algae and fungi. Laboratories introduce plants from the local flora and include field trips to terrestrial and marine habitats. Credit will not be given for both 323 and 203. (Prerequisite: completion of core) F(3-3)

**BIOL 324 (1½) HIGHER PLANTS**

The origins, classification, and evolution of land plants including bryophytes, ferns and fern allies, conifers and other gymnosperms, and flowering plants. Laboratories emphasize local plants and include field trips. Credit will not be given for both 324 and 204. (Prerequisite: completion of the core) S(3-3)

**BIOL 329 (1½) BIOLOGY OF THE VERTEBRATES**

Principles of systematics and evolution, using vertebrates as examples; principles of wildlife management. Considerable outside reading is required. Laboratory classes emphasize identification of native vertebrate species of British Columbia and introduce techniques of specimen preparation. Field trips. (Prerequisites: 307 or 207) S(2-3)

**BIOL 330 (ES 310) (1½) ECOLOGICAL METHODS**

An introduction to experimental and statistical ecology, including principles of experimental design and sampling methods for selected taxa. Laboratories include field sampling methods and data analysis. (Prerequisites: Completion of core and STAT program requirements) NO(3-3)

**BIOL 334 (1½) PLANTS AND PEOPLE**

Economically important plants and their products, sources of food, shelter, clothing, drugs, and industrial raw materials. Aspects of plant growth and development, physiology, breeding, and disease of agricultural and forest plants. (Normally credit for this course will not be counted toward degree programs in Biology, but Biology students may take this course as a free elective) (Prerequisite: Second year standing) F(3-0)

**BIOL 335 (formerly 431A) (1½) ICHTHYOLOGY**

Evolution, physiology, ecology, neurobiology, and behaviour of fishes. Laboratory topics include taxonomy of major groups of fishes, and fish ecology, physiology, and behaviour. Laboratories include field trips. (Credit will not be given for both 335 and MRNE 412) (Prerequisite: 307 or 207) NO(2-3)

**BIOL 338 (1½) APPLIED PLANT PHYSIOLOGY**

Application of principles of plant physiology to problems in agriculture, forestry, and air pollution. (Normally, credit for this course will not be counted toward degree programs in Biology, but Biology students may take this course as a free elective.) (Prerequisite: Second year standing) S(3-0)

**BIOL 343 (1½) DEVELOPMENTAL PLANT ANATOMY**

Origin and development of cells, tissues and organs in vascular plants with special emphasis given to seed plants. The mature structures are discussed as they relate to function. Recent studies of plant ultrastructure are considered in view of development and function. (Prerequisite: 324 or 204) F(3-3)

**BIOL 344 (1½) PLANT MICROTÉCHNIQUE**

Techniques to investigate structural aspects of plant growth, development, and function; paraffin methods, wood sectioning, maceration, clearing, chromosome preparations, photomicrography, histochemistry, and autoradiography. (Prerequisite: 324 or 204) (Offered in spring of even-numbered years) S(2-3)

**BIOL 345 (1½) ANIMAL BEHAVIOUR**

Animal behaviour emphasizing the range of functional patterns and critically assessing analogies with human behaviour. Practical studies to develop observational and descriptive skills are assigned. Field trips. (Credit will not be given for both 345 and MRNE 446) (Prerequisite: completion of core) F(3-3)

**BIOL 355 (formerly part of 350 and 455) (1½) EVOLUTION**

Mechanisms of evolution and the history of life on Earth, genetic variation and natural selection, speciation processes, and major events and patterns recorded in the fossil record. (Prerequisites: completion of core, or: 203 or 204, 206 or 207; 300) S(3-3)



**BIOL 360 (1½) CELL BIOLOGY**

Structure and function of animal and plant cells and tissues, membrane structure, transport, cellular compartments, cytoskeleton, cell growth and division, cell adhesion, extracellular matrix, tissue organization and renewal. (*Prerequisites*: Completion of core and BIOC program requirements) F(3-0)

**BIOL 361 (1½) MOLECULAR GENETICS**

Molecular basis of inheritance in eukaryotic organisms. Classical genetic theory, control of gene expression, chromosome structure and evolution, immunogenetics, population genetics. (*Prerequisites*: Completion of core and BIOC program requirements) S(3-0)

**BIOL 365 (1½) ANIMAL PHYSIOLOGY**

Fundamentals of animal physiological systems: principles of cellular and organismic homeostasis, nutrition, digestion, salt/water balance, respiration, circulation, muscle contraction, excitable membranes, sensory systems, brain functions, hormones, reproduction. Laboratory includes study of live animals. Credit will not be given for both 365 and either 305A or B. (*Prerequisite*: completion of core) F(3-3)

**BIOL 366 (1½) PLANT PHYSIOLOGY**

Principles of plant physiology: photosynthesis; water relations; ion uptake; translocation; carbohydrates; nitrogen and lipid metabolism; phenolics; phytohormones; tropisms; phytochrome. Credit will not be given for both 366 and 331A or B. (*Prerequisite*: completion of core) F(3-3)

**BIOL 400 (1½) HISTORY OF BIOLOGY**

The historical development of the major techniques and ideas of biology, including the significance of the important historical contributors to biology. (*Prerequisite*: 3rd year standing or permission of the instructor) S(3-0)

**BIOL 401A (1½) PRINCIPLES OF MOLECULAR GENETICS TECHNIQUES**

The tools of molecular biology and biotechnology; cloning vectors, cloning strategies used in recombinant DNA technology, and the origins of these tools. Student presentations cover the application of genetic engineering to medicine, agriculture, forestry, and related areas. (*Prerequisite*: 361 or 300) F(3-0)

**BIOL 401B (1½) LABORATORY APPLICATIONS OF MOLECULAR GENETICS**

Advanced techniques in molecular biology and molecular cloning, characterization of recombinant DNA molecules, gene expression, and polymerase chain reaction. (*Prerequisite*: 401A) (Enrollment limited to 20) NO(1-3)

**BIOL 405A (1½) CELLULAR PHYSIOLOGY I**

Seminars on recent advances in cell biology. Laboratory exercises in standard methods of animal cell tissue culture. (*Prerequisites*: 360 or 200 and BIOC 200, *pre- or corequisite*: BIOC 300 or permission of instructor. Consultation with instructor required prior to registration) (Enrollment limited to 10) NO(2-3)

**BIOL 405B (1½) CELLULAR PHYSIOLOGY II**

Seminars on recent advances in cell biology. Laboratory exercises in the tissue culture of specialized animal cells, cell fusion, and cytogenetics. (*Prerequisite*: 405A. *Prerequisite*: 405A) (Enrollment limited to 10) NO(2-3)

**BIOL 407 (1½) AQUACULTURE**

An introduction to ecologically based management strategies for the cultivation or enhancement of aquatic plants and animals; traditional and current practices will be considered together with the potential for future development and the environmental impacts of aquaculture. (Credit will not be given for both 407 and MRNE 450.) (*Prerequisites*: Fourth year standing or permission of the instructor) F(3-3)

**BIOL 408 (1½) BIOLOGY OF POLLUTION**

Biological concepts and methods applied to the recognition, definition, and measurement of excessive environmental alteration directly or indirectly affecting world biota, including humans; contributions of

bioscience to human perception of, and response to, environmental perturbation. Field and laboratory observation on organisms stressed by various levels of environmental change; one project report and attendance at seminars. (*Prerequisite*: Completion of core or permission of instructor) S(2-3)

**BIOL 409A (1½) NEUROBIOLOGY: MOLECULES TO BEHAVIOUR**

Cellular and molecular biology of excitable cells and mechanisms of intercellular communication. Evolution and functional organization of central nervous systems. Motor systems and mechanisms of coordination. Sensory biology. Interactions of genes, development, and experience in molding nervous systems and behaviour. (*Prerequisites*: 365 or 305A/B and 360/361 or permission of the instructor) F(3-0)

**BIOL 409B (1½) EXPERIMENTAL NEUROBIOLOGY**

Laboratory investigations of the neural basis of behaviour. Selected sensory and motor systems studied at the cellular, neuronal circuit, and whole animal levels. Techniques include extracellular and intracellular recording and stimulation; anatomical tracing of neuronal pathways; computerized acquisition and analyses of electrophysiological data. (*Prerequisite*: 409A or permission of the instructor) (Enrollment limited to 10) S(1-4)

**BIOL 410 (1½) HERPETOLOGY**

The biology of amphibians and reptiles, particularly evolutionary relationships, systematics, ecology, and physiology. Students are expected to make presentations. Laboratory classes consist mainly of taxonomic identifications. Field trips are taken when possible. (*Prerequisites*: 307 or 207; 330 or 306; *pre- or corequisite*: 355 or 455) S(2-3)

**BIOL 411A (1½) PHYCOLOGY I**

Marine and freshwater algae, emphasizing morphological, environmental impact, aquacultural and economic aspects. Field work emphasizes Cyanobacteria, Rhodophyta, and Phaeophyta and may include shipboard work and visits to freshwater environments. Laboratory work includes microtechnique, photomicrography, taxonomic identification, and some ecological or laboratory projects. (*Prerequisite*: 323 or 203 or permission of the instructor) F(2-3)

**BIOL 411B (1½) PHYCOLOGY II**

Marine and freshwater algae, emphasizing ecological, ecophysiological, morphological, morphological, environmental impact, aquacultural, and economic aspects. Field work emphasizes Cyanobacteria, Chlorophyta, Diatoms, Dinoflagellates, and lake Phytoplankton. Use may be made of the Simpson Cowichan Lake Field Station and Pacific coastal biota. (*Prerequisite*: 323 or 203 or permission of the instructor) S(2-3)

**BIOL 412 (1½) ADVANCED ENTOMOLOGY**

A study of recent advances in the field of entomology with special emphasis on insect physiology. Students will set up and conduct many of their own experiments, and will be expected to become familiar with the recent literature from leading journals of insect physiology. Both a seminar presentation and laboratory term projects will be required. (*Prerequisite*: 312) NO(2-3)

**BIOL 415B (1½) EXPERIMENTAL MYCOLOGY**

The molecular genetics of fungi. Assessment of genomic variation in fungal populations; cloning and expression of fungal gene products. Students conduct group research projects and present a report. (*Prerequisites*: 360 or 200, 323 or 203, 361 or 300, and permission of the instructor) S(2-3)

**BIOL 418 (1½) PLANT ECOLOGY**

An introduction to the factors controlling the abundance and distribution of terrestrial plants. Topics examined will include: the effect of environmental factors on plants; population dynamics; competition; plant-animal interactions; community composition, structure, and function; how communities change along environmental gradients; succession; diversity; major types of plant communities. Costs of field trips will be borne by the students. (*Prerequisite*: 330 or 306 or permission of the instructor; 318 recommended) NO(3-3)



**BIOL 425A (1½) ENVIRONMENTAL PHYSIOLOGY OF ANIMALS I**

Physiological adaptations of animals to variations in the physical and chemical environment. The effects of radiation, low temperature, and chemical toxicology. The laboratory involves familiarization with major techniques and demonstration experiments. (*Prerequisite:* 365 or 305A/B) F(2-3)

**BIOL 425B (1½) ENVIRONMENTAL PHYSIOLOGY OF ANIMALS II**

Physiological adaptations of animals in the physical and chemical environment. This course concentrates on topics not covered in 425A, such as adaptations to altitude, diving, and deserts. Students participate in presentation of lecture material. The laboratory involves a major research project. (*Prerequisite:* 425A or permission of the instructor) NO(2-3)

**BIOL 427 (1½) POPULATION ECOLOGY**

A survey of theories of population growth and regulation, life history strategies, and population interactions. Requirements include considerable outside reading and presentation of a class seminar. Laboratories consist of experiments designed to demonstrate basic principles of population ecology and the use of relevant quantitative techniques. Quantitative aspects of population ecology are stressed. (*Prerequisite:* 330 or 306; *pre- or corequisite:* 355 or 455) F(2-3)

**BIOL 430 (1½) TAXONOMY AND BIODIVERSITY**

The principles of taxonomy in the context of biodiversity assessment. Topics will include the construction of biological classification systems, and their utilization in the development of species identification procedures and in Codes of Nomenclature. Practical assignments are designed to develop skills in taxonomic procedures. (*Prerequisite:* completion of core) S(2-3)

**BIOL 431 (1½) (formerly 431B) TOPICS IN FISH BIOLOGY**

Selected topics on behaviour, migration, reproduction and ontogeny of fishes. Individual projects may be required. Laboratory work deals with the taxonomy of selected groups, and will include field trips. (Credit will not be given for both 431 and MRNE 412.) (*Prerequisite:* 335) NO(2-3)

**BIOL 432 (1½) MOLECULAR ENDOCRINOLOGY**

Basic and molecular aspects of endocrinology. Brain hormones and their precursors, insulin and its receptor, gene-associated peptides, new glycoprotein hormones, growth factors, steroids, the superfamily of steroid and thyroid receptors, pheromones, oncogenes, and immunoendocrinology. Lectures and presentations of scientific papers. (*Prerequisite:* 365 or 305A or permission of the instructor) F(3-0)

**BIOL 443 (1½) BIOLOGY OF CONIFERS**

Biology of conifers with special emphasis on evolution, taxonomy, distribution, physiology, growth and development, and reproduction of native species. Laboratories involve field trips, seedling physiology, and development of vegetative and reproductive structures. (*Prerequisite:* 324 or 204) (Offered in spring of odd-numbered years) NO(2-3)

**BIOL 450A (1½) (formerly half of 450) MARINE PLANKTON BIOLOGY**

A comprehensive study of systematics, physiology and ecology of marine plankton for students with an introductory laboratory course in oceanography. A basic understanding of physical and chemical oceanography is assumed. Effects of light, temperature, pressure, nutrients and other physical and chemical parameters on primary productivity, distribution and abundance of bacteria and phytoplankton, will be examined. Students will be expected to do considerable outside reading from relevant oceanographic literature and to incorporate this with a field or laboratory research program. Participation in research cruises is required. (*Prerequisite:* 311B) F(2-3)

**BIOL 450B (1½) (formerly half of 450) MARINE PLANKTON BIOLOGY**

A comprehensive study of systematics, physiology and ecology of marine plankton for students with an introductory laboratory course in oceanography. A basic understanding of physical and chemical oceanography is assumed. Effects of light, temperature, pressure, nutrients and other physical and chemical parameters on secondary productivity,

distribution and abundance of protozoa and zooplankton, will be examined. Students will be expected to do considerable outside reading from relevant oceanographic literature and to incorporate this with a field or laboratory research program. Participation in research cruises is required. (*Prerequisite:* 311B) S(2-3)

**BIOL 453 (1½) STRESS PHYSIOLOGY OF PLANTS**

An advanced study of the physiological responses of plants to temperature extremes, droughts, salinity, radiation stress, and air pollution. (*Prerequisite:* 366 or 331A/B or permission of instructor) S(3-0)

**BIOL 460 (1) HONOURS SEMINAR**

Participation in seminars as arranged by the Department and the Honours Coordinator. Required of all Honours students in their fourth year of studies, as an addition to the normal 15 units.

Y(Grading: COM, N, or F)

**BIOL 490 (1½) DIRECTED STUDIES AND RESEARCH IN BIOLOGY**

Departmental permission may be given for supervised research projects, individual study, or directed readings. (*Prerequisites:* cumulative GPA of 5.0 on last 15 units of course work and fourth year standing) 490 may be repeated to a maximum of 3 units. (Grading: INC, letter grade)

|      |   |     |
|------|---|-----|
| 490A | Directed Studies and Research in Botany                     | FSY |
| 490B | Directed Studies and Research in Ecology                    | FSY |
| 490D | Directed Studies and Research in Marine Biology             | FSY |
| 490E | Directed Studies and Research in Zoology                    | FSY |
| 490F | Directed Studies and Research in Cell and Molecular Biology | FSY |
| 490G | Directed Studies and Research in Evolution                  | FSY |

**MARINE SCIENCE**

The Marine Science courses listed below are offered at the Bamfield Marine Station only during the summer months and may be taken by students with permission of the Biology Department. However, during the winter, courses may be offered by Simon Fraser University at Bamfield. Students working towards a University of Victoria degree may be authorized to take these by the Assistant Dean of Arts and Science.

When authorized by the Dean, such courses will be treated as if they had been offered by the Biology Department at the University of Victoria in determining the students' grade point averages, and in satisfying University, Faculty, and Departmental program requirements.

**MRNE 400 (3) DIRECTED STUDIES**

A course of directed studies under the supervision of a member of faculty. The study will involve a research project approved by the supervisor in the field of interest of the student, and will be designed to take maximum advantage of the laboratory and/or field opportunities offered by the Bamfield Marine Station. (May be repeated with permission of the Department)

**MRNE 401 (3) SPECIAL TOPICS IN MARINE BIOLOGY**

This course will be offered, as opportunities arise, by distinguished scientists who are working at the Bamfield Marine Station. It is expected that the course will generally be of a specialized nature and be at a level appropriate to graduate or senior undergraduate students. (May be repeated with permission of Department)

**MRNE 402 (1½) SPECIAL TOPICS IN MARINE BIOLOGY**

This course will be offered, as opportunities arise, by distinguished scientists who are working at the Bamfield Marine Station and are prepared to offer a course extending over a three week period. This course will be of a specialized nature. (May be repeated with permission of Department)

**MRNE 410 (3) MARINE INVERTEBRATE ZOOLOGY**

A survey of marine phyla, with emphasis on the benthic fauna in the vicinity of the Bamfield Marine Station. The course includes lectures, laboratory periods, field collection, identification, and observation. Emphasis is placed on the study of living specimens in the laboratory and in the field.



**MRNE 411 (3) COMPARATIVE INVERTEBRATE EMBRYOLOGY**

A comprehensive study of development of marine invertebrates available at the Bamfield Marine Station, including all major phyla and most of the minor phyla. A total of 25 or 30 lectures, covering gametogenesis, fertilization, larval development and metamorphosis of different groups will be given. Laboratory work will include methods and techniques of obtaining and handling of gametes, preparation and maintenance of larval cultures, and observations up to metamorphosis if possible. Some selected and clearly defined experiments will be performed. Efforts will be made also to study various pelagic larvae collected from the plankton. It is hoped that such a broad approach, as outlined above, will provide the student with fundamental frameworks and insights for analytical studies on the one hand, and for reproductive ecology on the other. (Credit will not be given for both 411 and BIOL 403.)

**MRNE 412 (3) BIOLOGY OF FISHES**

Classification, physiology, ecology, behaviour and zoogeography of fishes with particular emphasis on those in the marine environment of the British Columbia coast. This course will involve some field projects. (Credit will not be given for both 412 and BIOL 431.)

**MRNE 413 (3) BIOLOGY OF MARINE MOLLUSCS**

An advanced course of selected topics emphasizing functional morphology, ecology and evolution of this diverse phylum; field trips will be undertaken to survey the representative molluscs of the Bamfield region. Students will be expected to complete an independent field or laboratory study of selected molluscs. (*Prerequisite*: 410 or equivalent)

**MRNE 420 (3) MARINE PHYCOLOGY**

A survey of the marine algae, with emphasis on the benthic forms in the vicinity of the Bamfield Marine Station. The course includes lectures, laboratory periods, field collection, identification, and observation. Emphasis is placed on the study of living specimens in the laboratory and in the field.

**MRNE 430 (3) MARINE ECOLOGY**

An analytical approach to biotic associations in the marine environment. Opportunities will be provided for study of the intertidal realm in exposed and protected areas and of beaches and estuaries in the vicinity of the Bamfield Marine Station; plankton studies and investigations of the subtidal and benthic environments by diving and dredging are envisaged. (Credit will not be given for both 430 and BIOL 406.)

**MRNE 435 (3) INTRODUCTION TO BIOLOGICAL OCEANOGRAPHY**

An introduction to the biology of the oceans, with supporting coverage of relevant physics and chemistry. Emphasis will be placed on plankton biology, community structure and life histories, and influencing environmental factors. Collections will be made from sheltered inlets, through Barkley Sound to offshore waters. The course will involve both field and laboratory studies of plankton organisms.

**MRNE 440 (3) BIOLOGY OF MARINE BIRDS**

A study of the interrelationship of birds and the marine environment; the systematics and ecological relationships, behaviour, life histories, movement and conservation of marine birds; census techniques and methods of studying marine birds in the field will be treated utilizing seabirds and marine-associated birds in the Barkley Sound region. Seabird identification, classification, morphology, plumages and molt will be examined in the laboratory. (*Prerequisite*: A course in Vertebrate Zoology or permission of the instructor)

**MRNE 445 (3) BIOLOGY OF MARINE MAMMALS**

A survey course covering systematics and distribution of marine mammals, their sensory capabilities and physiology, with special emphasis on the Cetacea; the course includes lectures, laboratory periods and numerous field trips in the Barkley Sound region. The course will involve an independent field study. (*Prerequisite*: A course in Vertebrate Zoology)

**MRNE 446 (3) COMPARATIVE ETHOLOGY**

A comparative study of marine animals (vertebrate and invertebrate) emphasizing behavioural description, underlying physiological mechanisms, the biological significance of behaviour and behavioural evolution; the course will include independent laboratory and field studies. (Credit will not be given for both 446 and BIOL 345. *Prerequisites*: Courses in each of Invertebrate Zoology, Vertebrate Zoology, Ecology and Physiology)

**MRNE 450 (1½) PRINCIPLES OF AQUACULTURE**

An interdisciplinary introduction to the principles underlying the commercial cultivation of aquatic plants and animals emphasizing marine systems. The course will include working site-visits to a range of commercial farms and research and development facilities. (Credit will not be given for both 450 and BIOL 407.)

**MRNE 454 (1½) SPECIAL TOPICS IN AQUACULTURE**

An examination of the culture techniques for selected groups of aquatic plants, animals or micro organisms. Participants will be expected to complete a project which examines some aspect of applied science relevant to commercial culture. (Credit will not be given for both BIOL 407 and MRNE 454.)

**MRNE 460 (1½) SPECIAL TOPICS IN AQUACULTURAL APPLIED SCIENCE**

An examination of the principles underlying the application of selected areas of scientific information to commercial aquaculture. Participants will be expected to complete a written project.

**MRNE 470 (1½) DIRECTED RESEARCH IN AQUACULTURE**

Design and execution of a research project in the field of aquaculture under the written supervision of a scientist working in association with the Bamfield Station. A written report is a requirement.

## DEPARTMENT OF CHEMISTRY

Terence E. Gough, B.Sc., Ph.D. (Leic.), F.C.I.C., Professor and Chair of the Department  
 Walter J. Balfour, B.Sc. (Aberd.), Ph.D. (McM.), D.Sc. (Aberd.), F.C.I.C., Professor  
 Gordon W. Bushnell, M.A., B.Sc. (Oxon.), Ph.D. (W. Indies), Professor  
 Keith R. Dixon, B.A. (Cantab.), Ph.D. (Strath.), F.C.I.C., Professor  
 Alfred Fischer, B.Sc., M.Sc., Ph.D. (N.Z.), F.C.I.C., Professor  
 Thomas M. Fyles, B.Sc. (U. of Vic.), Ph.D. (York), F.C.I.C., Professor  
 Alexander D. Kirk, B.Sc., Ph.D. (Edin.), F.C.I.C., Professor  
 Alexander McAuley, B.Sc., Ph.D., D.Sc. (Glas.), C.Chem., M.R.S.Chem., F.C.I.C., Professor  
 Reginald H. Mitchell, B.A., M.A., Ph.D. (Cantab.), F.C.I.C., Professor  
 Stephen R. Stobart, B.Sc., Ph.D. (Nott.), Professor  
 Peter C.F. Wan, B.Sc., Ph.D. (Tor.), Professor  
 Graham R. Branton, B.Sc., Ph.D. (Southampton), Associate Professor  
 Thomas W. Dingle, B.Sc., Ph.D. (Alta.), Associate Professor  
 David A. Harrington, B.Sc. (Cant.), Ph.D. (Auck.), Associate Professor

Martin B. Hocking, B.Sc. (Alta.), Ph.D. (Southampton), C.Chem., F.R.S.Chem., F.C.I.C., Associate Professor  
 Gerald A. Poulton, B.A., Ph.D. (Sask.), F.C.I.C., Associate Professor  
 Frank P. Robinson, A.B. (Fisk), Ph.D. (Alta.), F.C.I.C., Associate Professor  
 Paul R. West, B.Sc., Ph.D. (McG.), Associate Professor  
 David J. Berg, B.Sc. (U. of Vic.), Ph.D. (Calif., Berk.), Assistant Professor  
 Cornelia Bohne, B.Sc., Ph.D. (São Paulo), Assistant Professor  
 Charles X.W. Qian, B.A. (Harbin Inst. Technology, P.R.C.), M.S. (Calif. State), Ph.D. (S. Calif.), Assistant Professor  
 John A. Barnes, B.A. (Kan.), M.Sc., Ph.D. (Stan.), Senior Scientific Assistant - Mole Beams Laboratory  
 David E. Berry, B.Sc. (Liv.), Ph.D. (Brist.), Laboratory Supervisor  
 Ian Blazey, B.Sc. (R'dg.), Administrative Officer  
 Terrance K. Davies, B.Sc. (U. of Vic.), Senior Scientific Assistant  
 Christine Greenwood, Senior Scientific Assistant



Kurt Headrick, B.Sc., Ph.D. (Carleton), Senior Laboratory Instructor  
 Peter Marrs, B.Sc., Ph.D. (Brit. Col.), Senior Laboratory Instructor  
 David L. McGillivray, B.Sc. (Edin.), Ph.D. (Ott.), Senior Scientific Assistant

Richard S. Reeve, B.Sc. (U. of Vic.), Ph.D. (Queen's), Coordinator, Cooperative Education Program

Alan W. Taylor, B.Sc., M.Sc. (U. of Vic.), Ph.D. (Brit. Col.), Senior Laboratory Instructor

#### Visiting, Adjunct and Cross-listed Appointments:

Robert N. O'Brien, B.A.Sc., M.A.Sc. (Brit. Col.), Ph.D. (Manc.), P.Eng., F.R.S.A., Adjunct Professor (1993-95)

M. Coren Hamilton, B.Sc. (McG.), Ph.D. (Alta.), Adjunct Associate Professor (1993-95)

Stephen L. Grundy, B.Sc., Ph.D. (Sheff.), Adjunct Assistant Professor (1993-95)

## GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 306.

## GENERAL, MAJOR AND HONOURS PROGRAMS

The Department of Chemistry offers a variety of programs leading to the B.Sc. degree. These are intended to provide students with the opportunity of undertaking either specialized studies in Chemistry, or a broader program with Chemistry as a focal point supplemented by other disciplines. These programs provide preparation for a wide range of careers requiring a background of Chemistry.

The Honours and Major Programs are designed for those students wishing to embark on careers as professional chemists. In the Honours degree, a student undertakes an in-depth study of Chemistry with other supporting physical sciences. A feature of the Program is that the student participates in a short research project in the final year of study. The Honours Program normally requires 35½ units\* of Chemistry courses within a total of 61 units for the degree. Six units of mathematics, 3 units of physics and 3 units of another science are required corequisites. On graduation as a professional chemist the candidate may either enter employment in a variety of industries or proceed to graduate school and the higher qualifications of M.Sc. and Ph.D. The Major Program provides the student with somewhat more flexibility in the choice of courses. Twenty-five and one half units\* of Chemistry are required, together with 6 units of mathematics, 3 units of physics and 3 units of another science as corequisites. The degree is sufficiently specialized to present an attractive chemical background to a prospective employer and to provide the opportunity for students maintaining high averages to continue to graduate school. Both these programs are suitable for students intending to enter a career in teaching at the secondary level.

The Department also offers considerable scope for students wishing to include Chemistry as part of a B.Sc. or B.A. General program. Students with this training will frequently find career opportunities in industry, both at the technical and managerial levels, in business, teaching and many other occupations. The influence of Chemistry in modern society is considered in Chemistry 300A/B courses intended for nonscientists who have successfully completed at least 15 units of university credit.

\* Students who bypass 102 by completing the 140/245 sequence require 34 units of Chemistry courses for an Honours program and 24 units of Chemistry courses for the Major program.

## COOPERATIVE EDUCATION PROGRAMS

The Cooperative Education Program in the Faculty of Arts and Science is described on page 41.

Entry to the Chemistry Cooperative Education Program is restricted to students who are enrolled in an Honours or Major program offered by the Department. To enter and remain in the Chemistry Cooperative Education Program, students must normally maintain a B average (4.50) in Chemistry courses and overall. Students are also required to complete satisfactorily at least five work terms. Their first work term normally will be in the summer at the end of their first academic year and thereafter the year-round sequence is one of alternating four month terms of academic study and work experience. A student may at any

time transfer from the Chemistry Cooperative Education Program to a regular Chemistry program.

Each Work Term is recorded on the student's academic record and transcript (as COM, N or F) and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

## COURSE REQUIREMENTS OF CHEMISTRY UNDERGRADUATE PROGRAMS

Students with credit in the following courses which are no longer offered may make the specified substitutions in any undergraduate program:

|                  |                 |
|------------------|-----------------|
| CHEM 100         | for 091 and 101 |
| CHEM 124         | for 101 and 102 |
| CHEM 145         | for 245         |
| CHEM 224         | for 222 and 245 |
| CHEM 233         | for 231 and 235 |
| CHEM 316 and 317 | for 312 and 318 |
| CHEM 325 and 422 | for 424 and 425 |
| CHEM 423         | for 323         |

### First Year (General or Major or Honours)

|   |      |
|---|------|
| CHEM 091/101 <sup>A</sup> , or 101 <sup>B</sup> , or 140 <sup>C</sup> | (1½) |
| CHEM 092/102 <sup>A</sup> , or 102 <sup>B</sup> , or 245 <sup>D</sup> | (1½) |
| MATH 100/101  | (3)  |
| PHYS 112 <sup>E</sup>   | (3)  |
| Other courses (Electives; may include CHEM 231)                       | (6)  |

<sup>A</sup> For students with Chemistry 11 and Mathematics 12 or equivalents

<sup>B</sup> For students with Chemistry 12 and Mathematics 12 or equivalents

<sup>C</sup> For students with at least "B" standing in Chemistry 12 and Mathematics 12 or equivalents

<sup>D</sup> For students with at least "B" standing in CHEM 140

<sup>E</sup> Physics requirement may also be satisfied by PHYS 120/220

### Second Year (General)

|                           |            |
|---------------------------|------------|
| CHEM 213/222/231/235/245  | (7½ or 6*) |
| Other courses (Electives) | (7½ or 9*) |

\* If CHEM 245 completed previously

### Second Year (Major or Honours)

|  |            |
|--|------------|
| CHEM 213/222/231/235/245   | (7½ or 6*) |
| Three units of mathematics or statistics courses chosen from<br>MATH 200, 201, 205, 224, 233A, 233B, 233C, and<br>STAT 255, 260 (a maximum of 1½ units of STAT courses<br>may be used to satisfy this requirement)               | (3)        |
| Three units of 200 level science courses chosen from ASTR,<br>BIOC, BIOL, CSC (including 160), MATH, MICR, PHYS, or<br>STAT courses with the exception of BIOC 201, BIOL 250, 251,<br>CSC 200, MATH 240, 242, PHYS 210, STAT 254 | (3)        |
| Other courses (Electives; may include options not used<br>above)   | (3* or 1½) |

\* If CHEM 245 completed previously

### Third and Fourth Years (General)

|   |      |
|---|------|
| Nine additional units of chemistry in courses numbered above<br>300 for which the required prerequisites have been taken, at<br>least six units of which must have a laboratory component | (9)  |
| Nine units in a second area of concentration  | (9)  |
| Other courses   | (12) |

### Third and Fourth Years (Major)

|   |      |
|---|------|
| CHEM 312/318/323/324/335/338/345/346        | (12) |
| Any two of CHEM 411/424/425/433/434/444/446 | (3)  |
| Other courses                               | (15) |

### Third Year (Honours)

|  |      |
|--|------|
| CHEM 312/318/323/324/335/338/345/346/399 | (13) |
| Other courses                            | (3)  |

### Fourth Year (Honours)

|   |     |
|---|-----|
| Any six of CHEM 411/424/425/433/434/444/446 | (9) |
| CHEM 499                                    | (3) |
| Other courses                               | (3) |



## NOTES:

1. Courses may be taken in different sequences and in different years than those indicated provided that the co- and prerequisite requirements are satisfied. However, students must be extremely careful in planning programs that differ from the normal sequence.

2. Glasses or face shields must be worn by all students in laboratories. These are available in the Department. Chemistry Department laboratory notebooks may be purchased in the University Bookstore.

## HONOURS

The general requirements for admission to the Third Year of an Honours Program are specified in the table above. Permission of the Department is required for admission into each of the Third and Fourth Years of the Chemistry Honours program. For this, the Department is to be consulted, by interview or by letter, no later than one month before the last day for submission of applications for admission or readmission to the University. The minimum requirement for admission to the Fourth Year is a second class average in all the work of the Third Year and also in the required courses of the Third Year Chemistry Honours Program. Honours students are advised to include an additional mathematics course among their electives. Suitable courses are C SC 110, 212, 115, and MATH 323, 330A/B.

All Chemistry Honours students must maintain a full load throughout their program, i.e., must complete a minimum of 6 units of courses per term. A student in the Chemistry Honours Program is required to attain a 6.50 graduating average, and a grade point average of 6.50 or higher in all required third and fourth year chemistry courses in order to obtain a First Class Honours degree. To obtain a Second Class Honours degree a student is required to obtain at least a 4.00 graduating average.

## DOUBLE HONOURS

In order to qualify for First Class Honours in Chemistry, a student in a double Honours degree program which includes Chemistry as one of the areas must achieve a grade point average of at least 6.50 in all of the third and fourth year courses required for Honours Chemistry, and a grade point average of at least 6.50 in all of the third and fourth year chemistry courses. To obtain Second Class Honours in Chemistry, a student must obtain a grade point average of at least 4.00 in all of the third and fourth year courses required for Honours Chemistry.

## BIOCHEMISTRY OR MICROBIOLOGY AND CHEMISTRY COMBINED MAJOR

Students wishing to obtain a combined major in Biochemistry or Microbiology and Chemistry should take the following program.

|   |      |
|---|------|
| <b>First Year</b>   |      |
| CHEM 091/101 <sup>A</sup> , or 101 <sup>B</sup> , or 140 <sup>C</sup> | (1½) |
| CHEM 092/102 <sup>A</sup> , or 102 <sup>B</sup> , or 245 <sup>D</sup> | (1½) |
| ENGL 121/122, or 115/116  | (3)  |
| MATH 100/101  | (3)  |
| PHYS 112 <sup>E</sup>   |      |
| Other courses (Electives; may include CHEM 231)                       | (3)  |

<sup>A</sup> For students with Chemistry 11 and Mathematics 12 or equivalents

<sup>B</sup> For students with Chemistry 12 and Mathematics 12 or equivalents

<sup>C</sup> For students with at least "B" standing in Chemistry 12 and Mathematics 12 or equivalents

<sup>D</sup> For students with at least "B" standing in CHEM 140

<sup>E</sup> Physics requirement may also be satisfied by PHYS 120/220

|   |            |
|---|------------|
| <b>Second Year</b>  |            |
| BIOC 200  | (1½)       |
| BIOL 200  | (1½)       |
| CHEM 213/222/231/235/245  | (7½ or 6*) |
| 1½ units of mathematics chosen from MATH 200, 201, 205, 224, 233A, 233B, and 233C | (1½)       |
| MICR 200  | (3)        |
| Other courses (Electives)   | (0 or 1½*) |
| *If CHEM 245 completed previously   |            |

## Third Year

|                              |      |
|------------------------------|------|
| BIOC 300                     | (3)  |
| BIOC 301                     | (1½) |
| CHEM 323/324/335/338/345/346 | (9)  |
| MICR 301/302                 | (3)  |

## Fourth Year

|  |      |
|--|------|
| Two of BIOC 401/403/404/405  | (3)  |
| BIOC 406 or MICR 406   | (3)  |
| BIOC 480 or MICR 480   | (1½) |
| CHEM 312/433   | (3)  |
| CHEM 424 or other 400 level Chemistry course with permission of department | (1½) |
| Two of MICR 401/402/403/404/405  | (3)  |

## COMBINED PROGRAMS IN CHEMISTRY AND MATHEMATICS

For a B.Sc. degree in the Combined Chemistry and Mathematics Program students may take a Major or Honours program. These programs are not joint degrees in Chemistry and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for either of these combined programs must contact the Chemistry and Mathematics & Statistics Departments and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Chemistry or Mathematics must consult with their adviser prior to making their final choice of courses.

All combined Chemistry and Mathematics Honours students must complete a minimum of 7½ units of courses per term. A student graduating in the combined Honours program is required to attain a 6.50 or higher graduating average and a grade point average of 6.50 or higher over the group of required 300 and 400 level courses in chemistry and mathematics in order to obtain a First Class Honours degree. To obtain a Second Class Honours degree a student is required to obtain at least a 4.00 graduating average.

## First Year (General or Major or Honours)

|   |            |
|---|------------|
| CHEM 091/101 <sup>A</sup> , or 101 <sup>B</sup> , or 140 <sup>C</sup> | (1½)       |
| CHEM 092/102 <sup>A</sup> , or 102 <sup>B</sup> , or 245 <sup>D</sup> | (1½)       |
| CHEM 213/222/231/235/245  | (7½ or 6*) |
| Two of C SC 110, 115 and 212  | (3)        |
| MATH 100/101/200/201/233A/233C  | (9)        |
| PHYS 112 <sup>E</sup>   |            |
| Other courses (Electives)   | (4½ or 6*) |

<sup>A</sup> For students with Chemistry 11 and Mathematics 12 or equivalents

<sup>B</sup> For students with Chemistry 12 and Mathematics 12 or equivalents

<sup>C</sup> For students with at least "B" standing in Chemistry 12 and Mathematics 12 or equivalents

<sup>D</sup> For students with at least "B" standing in CHEM 140

<sup>E</sup> Physics requirement may also be satisfied by PHYS 120/220

\*If CHEM 245 completed previously instead of 102

## Third and Fourth Year (Major)

|   |       |
|---|-------|
| (All courses listed below must be 300 level or above)   |       |
| CHEM 312/323/324/345/346/444 (or 425)/446   | (10½) |
| MATH 325/326/330A/330B/333A   | (7½)  |
| One of MATH 333C, 422 or 423  | (1½)  |
| Course chosen from the Mathematics and Statistics Department in consultation with that Department | (1½)  |
| Course(s) chosen in consultation with the Chemistry and Mathematics & Statistics Departments      | (3)   |
| Other courses (Electives)   | (6)   |

## Third and Fourth Year (Honours)

|  |       |
|--|-------|
| (All courses listed below must be 300 level or above)  |       |
| All Chemistry courses listed under Major program plus  | (10½) |
| CHEM 399/499   | (4)   |
| MATH 333A/333C/334/338/434/445A/B  | (10½) |
| Course(s) chosen from the Mathematics and Statistics Department in consultation with the Mathematics and Statistics Department | (3)   |
| Other courses (Electives)  | (3)   |



Some possible courses which might be used to fulfill the chosen units in the above programs are: CHEM 306; 318; 335; 337; 338; 424; 425; 444; C SC 349A; 349B; MATH 352, 368A, 368B (for Honours, 325 and 326); STAT 353\*; 354\*.

\* These courses have 200 level STAT courses as prerequisites, which would have to be included in the student's program as options.

## UNDERGRADUATE COURSES

The names of faculty instructing courses, together with the required and recommended texts for each course, may be obtained from the Department.

*Students formerly enrolled in Chemistry who have taken courses no longer listed in the Calendar should consult the Department to determine which of the courses taken may count as prerequisites for those currently listed.*

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### CHEM 091 (0) INTRODUCTION TO CHEMISTRY I (1/2 fee unit)

Special tutorial course to accompany CHEM 101 for students who do not have Chemistry 12. Students must also enroll in CHEM 101 in the same term. The 091/101 workload is very heavy; it is strongly recommended that students take a reduced course load. (*Prerequisites:* Mathematics 12 (or Algebra 12) and Chemistry 11 or their equivalents)

F(0-1-0)

### CHEM 092 (0) INTRODUCTION TO CHEMISTRY: II (1/2 fee unit)

Special tutorial course to accompany CHEM 102 for students who do not have Chemistry 12. Students must also enroll in CHEM 102 in the same term. The 092/102 workload is very heavy; it is strongly recommended that students take a reduced course load. (*Prerequisites:* Mathematics 12 (or Algebra 12) and Chemistry 11 or their equivalents; CHEM 101)

S(0-1-0)

### CHEM 101 (1 1/2) FUNDAMENTALS OF CHEMISTRY: I

Introduction to the modern theory of atomic structure and its relation to chemical bonding, molecules, states of matter; introduction to organic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Credit will not be given for both this course and any of 100, 124, 140 or 150) (*Prerequisites:* Algebra 12 (or Mathematics 12) and Chemistry 11 or 12 or their equivalents. Preference will be given to students with Chemistry 12. Students without Chemistry 12 must also enroll in 091 in the same term)

F(3-3)

### CHEM 102 (1 1/2) FUNDAMENTALS OF CHEMISTRY: II

Basic physical chemistry including thermodynamics, electrochemistry, and equilibrium in chemical systems; introduction to inorganic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Credit will not be given for both this course and any of 124, or 145. Students without Chemistry 12 must also enroll in 092 in the same term. Preference will be given to students with Chemistry 12) (*Prerequisite:* 100 or 101 or 140)

S(3-3)

### CHEM 140 (1 1/2) PRINCIPLES OF CHEMISTRY

Introduction to modern atomic structure and molecular orbital theory and their relation to chemical bonding, molecules, and states of matter; introduction to inorganic chemistry. This course includes a laboratory illustrating the behaviour of chemical systems and some of the basic techniques associated with quantitative chemical experimentation. (Designed for students with a good preparation in Chemistry and Mathematics who wish to take a challenging course in Chemistry and who feel confident in proceeding at an accelerated pace.) (Credit will not be given for both this course and any of 100, 101, 120, 124 or 150.) (*Prerequisites:* At least a B standing in Chemistry 12 and Mathematics 12 or their equivalents. If there is any uncertainty, a placement examination may be given.)

NO(3-3)

### CHEM 150 (1 1/2) ENGINEERING CHEMISTRY

Thermochemistry; atomic and molecular structure; chemical bonding; gases, liquids, and solids; solutions and phase equilibria; equilibrium; chemical thermodynamics; electrochemistry. (Credit will not be given for both this course and any of 100, 101, 102 or 140.) (*Prerequisites:* Admission to B.Eng. program, Algebra 12 (or Mathematics 12) and Chemistry 11 or their equivalents; Chemistry 12 is recommended.)

S(3-3)

### CHEM 213 (1 1/2) PRACTICAL SPECTROSCOPY

Elementary theory and applications of infrared, UV-visible, mass, and nuclear magnetic resonance spectroscopy to inorganic and organic compounds. (Credit will not be given for both this course and 233 or 314 or 316) (*Prerequisite:* 102 or at least a B grade in 140; pre- or corequisite: 231)

F(3-3)

### CHEM 222 (formerly half of 224) (1 1/2) INTRODUCTION TO INORGANIC CHEMISTRY

Fundamental concepts of inorganic chemistry, with emphasis on periodicity, structure, bonding and reactivity; principles will be illustrated using the chemistry of selected groups of elements. (*Prerequisites:* 102 or at least a B grade in 140)

SK(3-4)

### CHEM 231 (formerly half of 230/233) (1 1/2) INTRODUCTORY ORGANIC CHEMISTRY

Functional group survey; alkanes, cycloalkanes, conformational analysis; stereochemistry; nucleophilic substitution, elimination; alkenes, alkynes, dienes; alcohols and ethers. This course is a prerequisite for all other courses in organic chemistry. (Credit will not be given for both this course and either 230 or 233.) (*Prerequisite:* 100 or 101 or 140, or 120 with permission of the Department)

FS(3-0)

### CHEM 232 (formerly half of 230) (1 1/2) ORGANIC CHEMISTRY FOR HEALTH AND BIOLOGICAL SCIENCES

Aromatic compounds; introduction to spectroscopy; aldehydes, ketones; carboxylic acids and derivatives; natural products: carbohydrates, amino acids, proteins, terpenoids, steroids, aldol condensation parallels in biological systems, fatty acid biosynthesis. This course is intended for students in biology and those preparing to enter professional schools such as Medicine, Pharmacy, Dentistry, Forestry (see page 28) and Nursing. (Credit will not be given for both this course and any of 230 or 233 or 235) (*Prerequisites:* 231; 102 or at least a B grade in 140)

S(3-4)

### CHEM 235 (formerly half of 233) (1 1/2) ORGANIC CHEMISTRY

Free radicals; aromatic compounds; aldehydes and ketones, carboxylic acids and derivatives; beta-dicarbonyl compounds; carbohydrates. This course is a continuation of 231 intended for Honours and Major Chemistry students and is part of a sequence incorporating 335 and 339 which should be taken by any student contemplating further courses in organic chemistry. (Credit will not be given for both this course and any of 230 or 232 or 233) (*Prerequisites:* 231; 102 or at least a B grade in 140)

SK(3-4)

### CHEM 245 (formerly half of 224) (1 1/2) INTRODUCTORY PHYSICAL CHEMISTRY

Basic physical chemistry including thermodynamics, electrochemistry, properties of solutions, phase equilibria, and chemical kinetics; emphasis will be placed on the extension and application of the theory and principles introduced in Chemistry 100, 101, 102 and 140; the laboratory portion of the course emphasizes physical measurement applied to chemical systems. (Credit will not be given for both this course and 145.) (*Prerequisite:* 102 or at least a B grade in 140)

F(3-4)

### CHEM 300A (1 1/2) (formerly half of 300) CHEMISTRY IN MODERN SOCIETY

This course is intended for nonscientists and will consist of lectures, demonstrations, class experiments and discussions. This course is designed to show the relevance of chemistry to modern life by examination of such topics as drugs and poisons (eg. hallucinogens, narcotics), agricultural chemicals (eg. pesticides, fertilizers), and food chemicals (eg. vitamins, additives). Students will be encouraged to keep abreast of controversial chemical issues. Discussions will place emphasis on the correct application of the scientific facts as opposed to misleading



applications or speculations. (300A and 300B may be taken in either order.) (Credit may not be obtained for 300A/300B and any other Chemistry course numbered 300 and above.) (CHEM 300A and CHEM 300B are offered in alternate years.) NO(3-0)

#### **CHEM 300B (1½) (formerly half of 300) CHEMISTRY IN MODERN SOCIETY**

This course is intended for nonscientists, and will consist of lectures, demonstrations, class experiments and discussions. This course is designed to show the relevance of chemistry to modern life by examination of such topics as energy (e.g. petroleum, nuclear), radiochemistry, water pollution (e.g. soaps and detergents, industrial disposal), air pollution (e.g. smog, ozone), metals, and plastics. Students will be encouraged to keep abreast of controversial chemical issues. Discussions will place emphasis on the correct application of the scientific facts as opposed to misleading applications or speculations. (300A and 300B may be taken in either order.) (Credit may not be obtained for 300A or 300B and any other Chemistry course numbered 300 and above.) (CHEM 300A and CHEM 300B are offered in alternate years.) S(3-0)

#### **CHEM 302 (1½) INDUSTRIAL CHEMISTRY WITH SPECIAL REFERENCE TO AIR POLLUTION**

Chemical principles used in the manufacture of commodity chemicals, fertilizers, explosives, and in the mining and smelting industries. Problems and methods of emission control, by-product utilization and waste disposal, with particular reference to gaseous discharges. Elements of gaseous dispersal procedures and limitations, air pollution chemistry. (NOTE: This course is primarily designed for students who are not majoring in Chemistry. Credit will not be given for both 302 and 306.) (Prerequisite: 140 with at least a grade of B or 102) F(3-0)

#### **CHEM 303 (1½) INDUSTRIAL CHEMISTRY WITH SPECIAL REFERENCE TO WATER POLLUTION**

Chemical principles used in the petroleum production and refining, petrochemical, pulp and paper, and fermentation industries. Emission problems and their control, by-product utilization and waste disposal into soil, water and air. Assimilatory capacities, eutrophication, and natural and manmade control and recovery procedures for water pollutants. (NOTE: This course is primarily designed for students who are not majoring in Chemistry. Credit will not be given for both 303 and 306.) (Prerequisite: 231. Pre- or corequisite: 232 or 235) NO(3-0)

#### **CHEM 306 (1½) INTRODUCTION TO THE CHEMICAL PROCESS INDUSTRIES**

A comparative discussion of a number of chemical industries and the details of their processes. To include unit operations, unit processes and economics. (NOTE: This course is primarily designed for students taking a Chemistry program. Credit will not be given for both 306 and 302 or 303.) (Prerequisites: 231 and 245. Pre- or corequisites: 222 and 232 or 235) NO(3-0)

#### **CHEM 312 (1½) INTRODUCTORY QUANTITATIVE ANALYSIS**

An introduction to the basis of quantitative analytical chemistry, treatment of data and chemical equilibrium. Solution equilibria will be used as the chemical basis for some of the most commonly used chemical instrumental methods, namely potentiometry, chromatography, ultraviolet/visible and atomic absorption spectrometry. (Prerequisites: 145 or 245, or 232 or 235 with permission of Department) FK(3-3)

#### **CHEM 318 (1½) INSTRUMENTAL TECHNIQUES OF ANALYSIS**

Theory and applications of the most generally applied methods of chemical analysis such as infrared, raman and emission spectroscopy, polarography, high performance liquid chromatography, radiochemical analysis etc. (Prerequisites: 213 and 312) S(3-3)

#### **CHEM 323 (1½) INTRODUCTION TO ORGANOMETALLIC CHEMISTRY**

Structure and reactivity of organometallic compounds of the s and p block metals. Transition metal carbonyl chemistry. Hydrocarbon complexes of the transition metals: M.O. description of bonding, reactivity of coordinated polycycloolefins. Transition metal alkyls and allyls, insertion and oxidative addition reactions, organotransition metal complexes in catalysis. (Prerequisites: 213 and 222) S(3-3)

#### **CHEM 324 (1½) INTRODUCTION TO TRANSITION METAL CHEMISTRY**

Introduction to transition metal and coordination chemistry. Electronic structure of transition metal complexes (crystal and ligand field theory). Chemistry of the first row transition elements from titanium to zinc. (Prerequisites: 213 and 222) F(3-3)

#### **CHEM 335 (1½) SYNTHETIC METHODS IN ORGANIC CHEMISTRY**

Spectroscopy, design of syntheses in aliphatic, aromatic and some biomolecules. Aliphatic systems; carbanions, conjugated carbonyl compounds, amines in syntheses, functional group modifications. Aromatic systems; aromatic substitution processes, reactive substrates (phenols, amines), polynuclear aromatics. Biomolecules: synthesis and modification of heterocycles and carbohydrates. (CHEM 335 and 338 may be taken in either order.) (Prerequisite: 213 and 235, or 232 with permission of the Department) S(3-3)

#### **CHEM 336 (1½) INTRODUCTORY POLYMER CHEMISTRY**

Principles and practice of polymerization, copolymerization and basic polymer kinetics. Structure property relationships for typical organic polymer groups. Polymer technology. The laboratory is designed to acquaint students with procedures for polymer identification, polymerization/depolymerization process, determination of physical properties, and simple fabrication. (Prerequisite: 232 or 235) F(3-3)

#### **CHEM 337 (1½) BIO-ORGANIC CHEMISTRY**

Survey of electronic and medium effects on reactivity. Catalysis of organic reactions. Bio-organic reaction mechanisms and biomimetic model systems. (Prerequisite: 235, or 232 with permission of the department. Pre- or corequisite: 213) F(3-3)

#### **CHEM 338 (1½) SELECTED TOPICS IN ORGANIC STRUCTURE AND REACTIVITY**

Introduction to structural effects on reactivity. Qualitative molecular orbital theory. Pericyclic reactions, organic photochemistry and radical reactions. (335 and 338 may be taken in either order.) (Prerequisite: 235, or 232 with permission of the Department. Pre- or corequisite: 213) F(3-3)

#### **CHEM 345 (1½) THERMODYNAMICS, SOLUTIONS AND ELECTROCHEMISTRY**

Chemical thermodynamics. Properties of solutions. Electrochemistry. (CHEM 345 and 346 may be taken in either order.) (Prerequisite: 245) S(3-3)

#### **CHEM 346 (1½) GASES, LIQUIDS AND CHEMICAL KINETICS**

Properties of gases and liquids. Kinetic molecular theory. Phase equilibria. Chemical kinetics. (CHEM 345 and 346 may be taken in either order.) (Prerequisites: 245) FK(3-3)

#### **CHEM 399 (1) RESEARCH PARTICIPATION AND SEMINAR**

Introduction to Departmental research. Seminar report. (Grading: COM, N, or F) F(3-0)

#### **CHEM 400A (1½) APPLICATIONS OF CHEMISTRY**

This course is intended for students who have completed at least two years of chemistry. It will discuss the use of chemicals in agriculture (fertilizers, herbicides, insecticides, insect and plant hormones), foods (carbohydrates, fats, vitamins and additives), drugs (antacids, analgesics, steroids, anti-AIDS agents, hallucinogens), and other compounds useful in medicine. Discussions will center around how and why the chemicals work, and advantages and disadvantages of their application. (Prerequisites: 222, 245, and 232 or 235) S(3-0)

#### **CHEM 411 (1½) ADVANCED INSTRUMENTAL ANALYSIS**

Advanced topics in instrumental analysis which will include some of the following: mass spectrometry, x-ray spectroscopy, advanced electrochemical methods, EPR, etc. Included will be a discussion of electronic data acquisition and manipulation as used in modern chemical instrumentation. (Prerequisite: 318) S(3-3)



**CHEM 424 (1½) ADVANCED TRANSITION METAL CHEMISTRY**

A more advanced consideration of transition metal chemistry designed to build on the principles established in Chemistry 323 and 324. Emphasis will be given to the chemistry of 2nd and 3rd row transition elements together with special topics chosen from areas of current research interest. (*Prerequisites*: 323 and 324) FK(3-3)

**CHEM 425 (1½) PHYSICAL INORGANIC CHEMISTRY**

Applications of group theory in inorganic chemistry. Molecular orbital theory and electronic spectra of transition metal complexes. Kinetics and mechanisms of inorganic reactions. (*Prerequisites*: 213 and 324) (Not open for credit to students with credit in 325 or 422) S(3-3)

**CHEM 433 (1½) ORGANIC STRUCTURE DETERMINATION: THE CHEMISTRY OF NATURAL PRODUCTS**

Elucidation of the structures of organic compounds from spectral information. The chemistry of several classes of natural products, including examples demonstrating structural elucidation, synthesis, and biogenesis. (*Prerequisites*: 335 and 338) FK(3-3)

**CHEM 434 (1½) PHYSICAL ORGANIC CHEMISTRY**

Mechanisms of organic reactions. Reactive intermediates. Structural and solvent effects on reactivity. (*Prerequisites*: 335 and 338) S(3-3)

**CHEM 444 (1½) ADVANCED PHYSICAL CHEMISTRY**

Kinetics: theories of elementary reactions, molecular dynamics, transition state theory and applications to gas phase and solution reactions. Statistical mechanics: partition functions, ensembles, prediction of macroscopic properties from molecular data. Other selected topics may include: techniques for surface analysis, reactions and catalysis at metal and semiconductor surfaces, electrode kinetics, solid-state chemistry,

statistics and dynamics of wetting and similar phenomena. (*Prerequisites*: 345 and 346) S(3-3)

**CHEM 446 (1½) QUANTUM CHEMISTRY**

The basic principles of quantum mechanics and their application to simple physical models and to chemical systems, including the use of semiempirical methods. Molecular spectroscopy and symmetry. (*Prerequisites*: 213 and 245) F(3-3)

**CHEM 490 (1½) DIRECTED STUDIES**

In special cases the Department of Chemistry may give permission for individual studies and directed readings to be taken as 490. CHEM 490 may be taken more than once only in different areas of chemistry. FSK

- 490A Readings in Analytical Chemistry
- 490B Studies in Analytical Chemistry
- 490C Readings in Inorganic Chemistry
- 490D Studies in Inorganic Chemistry
- 490E Readings in Organic Chemistry
- 490F Studies in Organic Chemistry
- 490G Readings in Physical Chemistry
- 490H Studies in Physical Chemistry
- 490J Readings in Theoretical Chemistry
- 490K Studies in Theoretical Chemistry

**CHEM 499 (3) THESIS**

Experimental research under the direction of faculty. This course is required for Chemistry Honours students. Chemistry Major students may be granted permission by the Department to take the course as an elective. (Grading: INP; letter grade) YK(0-6;0-6)

## DEPARTMENT OF CLASSICS

John P. Oleson, B.A., M.A., Ph.D. (Harv.), F.R.S.C., Professor and Chair of the Department

Keith R. Bradley, B.A., M.A. (Sheff.), B.Litt. (Oxon.), F.S.A., Professor  
John G. Fitch, B.A., M.A. (Cantab.), Cert.Ed. (Leeds), Ph.D. (Cornell), Professor

Peter L. Smith, B.A. (Brit. Col.), M.A., Ph.D. (Yale), Professor  
Samuel E. Scully, B.A., M.Litt. (Brist.), Ph.D. (Tor.), Associate Professor

Gordon S. Shrimpton, B.A., M.A. (Brit. Col.), Ph.D. (Stan.), Associate Professor

Laurel M. Bowman, B.A. (Tor.), M.A. (Brit. Col.), Ph.D. (Calif., L.A.), Assistant Professor

Ingrid E. Holmberg, B.A. (Ver.), M.A., Ph.D. (Yale), Assistant Professor

**Visiting, Adjunct and Cross-listed Appointments:**

Patricia A. Clark, B.A. (Vic. Coll.), B.A., M.A. (U. of Vic.), Visiting Assistant Professor (1994-95)

### GRADUATE PROGRAMS

For information on studies leading to the M.A. degree, see page 308.

### GENERAL, MAJOR AND HONOURS PROGRAMS

The Department of Classics offers the student an opportunity to study Classics at any of three levels of concentration: General, Major and Honours Programs.

The General Program does not necessarily involve language study. The Major and Honours Programs do include the study of classical languages. For the Major and Honours Programs, the Department accommodates three kinds of emphasis in the study of classical languages: ancient Greek, Latin, and Classics (study of both Latin and Greek). It is supposed that students following the General or Major Program will be taking advanced courses in other departments. Students following an Honours Program with the Classics Department should note that it may be possible for them to complete an honours program in another field, if they have the joint consent of that department and the Department of Classics.

Students are welcome at any time to discuss their programs with members of the Department and are encouraged to do so as early as possible in the course of their studies at the University. The planning of one's program is important, since failure to complete prerequisites for advanced courses may seriously limit the type of degree open to a student.

Students completing first year and choosing Classics or Classical Studies as a major may be interested in exploring the Arts Co-op option. Please see page 49 for details regarding program requirements and options.

**General:**

- (a) 3 units of Departmental offerings normally at the 100 or 200 level.
- (b) 9 units of Departmental offerings numbered 300 or above.

**Major in Classical Studies:**

- (a) 6 units of Greek and/or Latin language at the 100 or 200 level.
- (b) 3 units of Classical Studies normally at the 100 or 200 level.
- (c) 9 units of Classical Studies at or above the 300 level.
- (d) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.
- 24 Total

**Major in Classical Studies: Ancient History Emphasis**

- (a) 6 units of Greek and/or Latin language at the 100 or 200 level.
- (b) 3 units of Classical Studies normally at the 100 or 200 level.
- (c) 12 units of Ancient History as follows:  
CLAS 330, 480A and 490;  
CLAS 340, 480C and 491.
- (d) 3 units of Departmental offerings at or above the 300 level.
- 24 Total

N.B. Students interested in majoring in Classical Studies: Ancient History Emphasis are urged to consult the Majors adviser in their first year if possible. Majors must obtain the adviser's approval for their third and fourth year programs.



**Major in Classics:****1. Greek Emphasis:**

- (a) GREE 100
- (b) GREE 200
- (c) GREE 300 (corequisite or prerequisite for other advanced Greek courses).
- (d) 3 units of Departmental offerings normally at the 100 or 200 level.
- (e) 6 units of Greek or 3 of Latin and 3 of Greek at or above the 300 level.
- (f) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.

24 Total

**2. Latin Emphasis:**

- (a) LATI 100
- (b) LATI 200
- (c) LATI 300 (corequisite or prerequisite for other advanced Latin courses).
- (d) 3 units of Departmental offerings normally at the 100 or 200 level.
- (e) 6 units of Latin or 3 units of Latin and 3 of Greek at or above the 300 level.
- (f) 6 units of Departmental offerings (i.e. language courses or classical studies) at or above the 300 level.

24 Total

**Honours:**

Students who are of good general standing, and who have achieved a first class or high second class standing in Departmental courses at the 100 and 200 level, may be admitted, with Departmental permission, into an intensified Honours program. Greek, Latin, and Classics Honours programs are meant for students with primary interests in language and literature; Classical Studies Honours is intended for those who wish to put greater emphasis on ancient history and/or archaeology. Prospective honours students should seek departmental advice at the earliest opportunity. All honours students are urged to complete as many courses as possible in Greek and/or Latin.

**First and Second Years:**

- (a) CLAS 100
- (b) At least two courses (6 units) from GREE 100, 200, LATI 100, 200
- (c) For Greek, Latin, or Classics Honours, at least 3 additional units in Greek or Latin; i.e., completion of any three of GREE 100, 200, LATI 100, 200.

NOTE: With Departmental approval, 3 units of higher-level work in Classical Studies may be substituted for CLAS 100.

**Third and Fourth Years:**

Required courses in the Third and Fourth years total 24 units for Greek, Latin, and Classics Honours, and 27 units for Classical Studies Honours. Each of the four programs requires a total of 36 units at all levels.

**Greek Honours:**

- (a) GREE 300, 400
- (b) 9 additional units in Greek numbered above 300
- (c) LATI 300
- (d) CLAS 330, or 3 units of History chosen from GREE 390, 490 and CLAS 480A
- (e) CLAS 485, CLAS 499 (1½ units)

**Latin Honours:**

- (a) LATI 300, 400
- (b) 9 additional units in Latin numbered above 300
- (c) GREE 300
- (d) CLAS 340, or 3 units of History chosen from LATI 390, 490 and CLAS 480C
- (e) CLAS 485, CLAS 499 (1½ units)

**Classics Honours:**

- (a) GREE 300, 400
- (b) LATI 300, 400
- (c) 7½ additional units in Greek and/or Latin at or above the 300 level
- (d) CLAS 330 or 340, or 3 units of approved study in ancient history
- (e) CLAS 485

**Classical Studies Honours:**

- (a) CLAS 330, 340
- (b) CLAS 371, 372
- (c) 4½ units chosen from CLAS 480 (A to D), 490, 491, 492
- (d) 9 additional units in Classical Studies and/or Greek and/or Latin at or above the 300 level
- (e) CLAS 485, CLAS 499 (3 units)

NOTE: It is recommended that all graduating Honours students acquire a reading knowledge of German, French, or Italian.

To obtain a First Class Honours Degree a student must achieve (1) a graduating average of at least 6.50, (2) a grade point average of at least 6.50 in those Departmental courses at the 300 and 400 level that are required for the degree program, and (3) a grade of at least B+ in any required 400 level language course.

To obtain a Second Class Honours Degree a student must achieve (1) a graduating average of at least 3.50, (2) a grade point average of at least 3.50 in those Departmental courses at the 300 and 400 level that are required for the degree program, and (3) a grade of at least C+ in any required 400 level language course.

A student who fails to meet Departmental requirements for first class standing in the Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major Degree. A student who fails to meet Departmental requirements for second class standing but has a second class graduating average will be offered a Second Class Major Degree.

**Directed Reading/Study Courses**

Subject to the availability of faculty and in consideration of student demand, the above courses will be offered from time to time under the designated headings A, B, C, etc. in the regular winter session. Outstanding students who may wish to undertake these courses as Summer Studies courses should apply to the Department for permission. Each subdivision of Greek and Latin 390 and 490 is considered a distinct course and cannot be taken twice for credit. Students who wish to explore an area of ancient literature in some depth should choose carefully from Departmental offerings.

**UNDERGRADUATE COURSES****CLASSICAL STUDIES**

A knowledge of the Greek and Latin languages is not required for the following courses.

CLAS 100 is designed primarily as an elective for students in all fields. Any student in Second Year who has successfully completed 100 should take either a course in Latin or Greek or a Classical Studies course at the 200 or 300 level. *First Year students may take Classical Civilization courses above the 200 level only with Department permission. Any student in Second Year may register for courses in Classical Studies at the 300 level. CLAS 100 may not be taken by students who have already received credit for any courses in Classical Studies at the 300 level.*

Appropriate credit in the Department of History may be given for CLAS 330 or 340 or 480A or 480C. PHIL 421 and 422 are acceptable for credit in all programs in the Department of Classics in lieu of any 400 level course in Classical Studies.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

**CLAS 100 (3) GREEK AND ROMAN CIVILIZATION**

An approach to the civilization of Greece and Rome through the evidence of literature, history, and archaeology. Attention will be focused upon those aspects of ancient cultural and intellectual growth that are of significance in the western tradition. Emphasis will be placed upon the Minoan and Mycenaean civilizations, 5th century Athens, and Augustan Rome. Essays will be required and there will be a written examination. Readings will include Homer's *Iliad* and *Odyssey*, selections from Herodotus and Thucydides, Sophocles' *Oedipus The King* and other representative Greek dramas, selected dialogues of Plato, Livy, *The Early History of Rome*, Vergil's *Aeneid* and part of Ovid's *Metamorphoses*, and other representative texts. Y(3-0)



**CLAS 200 (1½) MYTHOLOGY OF GREECE AND ROME**

A study of the origins of classical myth, its expression in the literature and art of ancient Greece, and its further development in the Roman experience. Topics will include cosmic and divine myth; heroic saga; the influence of classical myth on later European culture. Consideration will be given to various modern systems of analysis and interpretation. Texts: Hesiod, *Theogony*; Euripides, *Bacchae*; Ovid, *Metamorphoses*; Morford and Lenardon, *Classical Mythology* F(3-0)

**CLAS 250 (1½) THE CONTRIBUTION OF GREEK AND LATIN TO THE ENGLISH LANGUAGE**

Out of 20,000 common words in English, 10,000 came from Latin directly or through French. The Greek element is also impressive, particularly in the ever-expanding vocabulary of science. Among topics studied will be the Greek script, principles of transliteration, the formation of nouns, adjectives and verbs, hybrid words, neologisms and semantic changes. S(3-0)

**CLAS 300 (1½) CLASSICAL EPIC**

A study of Greek and Roman epic poetry. Particular attention will be paid to *Iliad* and *Aeneid*. Students will be expected to read the *Odyssey*; one other work (or selections from several authors) will also be studied. (Prerequisite: 100 or permission of the Department). F(3-0)

**CLAS 301 (formerly 201) (1½) TRADITION AND ORIGINALITY IN CLASSICAL LITERATURE**

A comparative study of the content and form of major works by Greek and Roman writers. The course will concentrate on the important genre of didactic poetry, together with one or more genres to be chosen from the following: biography, philosophy, lyric poetry, tragedy, pastoral poetry, oratory. The following will be among the topics discussed: What part does imitation or the adaptation of traditional material play in classical literature? How can a creative writer be original while working within a strong tradition? Texts for didactic: Hesiod, *Works and Days*; Lucretius, *The Ways Things Are*; Vergil, *Georgics*; Ovid, *The Art of Love*. Texts for other genres: to be announced. NO(3-0)

**CLAS 320 (1½) GREEK TRAGEDY**

The origins and developments of tragic drama in ancient Greece. The study, in English translation, of representative plays of Aeschylus, Sophocles and Euripides. (Prerequisite: None; 100 or 200 or 301 recommended) NO(3-0)

**CLAS 322 (formerly part of 321) (1½) GREEK AND ROMAN DRAMA**

Special attention will be given to the various forms of Greek comic and nontragic drama and their development in the Roman world. Major emphasis will be on Aristophanes, Euripides, Menander, Plautus and Terence. Study of Roman drama may include analysis of representative plays of Seneca. (Prerequisite: None; 100 or 200 or 301 or 320 recommended) NO(3-0)

**CLAS 325 (1½) TOPICS IN CLASSICAL LITERATURE**

Topics in Greek and Latin literature, in depth. The course has variable content and may be taken more than once, to a maximum of 3 units, for credit in different topics. Topic for 1995-96: "Attitudes towards the Environment in Ancient Literature" (Prerequisite: 100; corequisite: one of 200, 300, 301, 320, 322, or permission of the instructor) S(3-0)

**CLAS 326 (1½) TOPICS IN CLASSICAL ANTIQUITY**

Topics in Greek and Latin civilization, in depth. The course has variable content and may be taken more than once, to a maximum of 3 units, for credit in different topics. (Prerequisite: 100; corequisite: one CLAS 300-level course, or permission of the instructor) NO(3-0)

**CLAS 330 (3) GREEK HISTORY**

A survey of Greek history from the Bronze Age to the death of Alexander, with special emphasis on the political, economic, and cultural achievements of the 5th and 4th centuries. Texts: Bury-Meiggs, *A History of Greece*; Plutarch, ed. E. Fuller, *The Rise and Fall of Athens*; Herodotus, *The Histories*; Thucydides, *The History of the Peloponnesian War* Y(3-0)

**CLAS 335 (1½) WOMEN IN CLASSICAL ANTIQUITY**

A survey of Greek and Roman attitudes towards the place of women in ancient society. Particular topics studied will depend on the interests of the instructor, but may include the following: the role of women in law, religion, and the economy; marriage and childbearing practices; and literary representations of women. (Prerequisite: None; 100 or 300 or 340 recommended) Texts: Readings from Greek and Roman authors in translation, and secondary sources recommended by the instructor. S(3-0)

**CLAS 340 (3) ROMAN HISTORY**

A survey of Roman history from earliest historical times until the age of Constantine. Emphasis falls on the creation of Rome's empire, the transition from government by senate to rule by emperor, and the nature of Roman imperialism. NO(3-0)

**CLAS 345 (1½) SLAVERY IN THE ROMAN WORLD**

Introduction to the fundamental importance of slavery as a component part of Roman society from c.250 B.C. to c.A.D. 300, a period in which Rome was a true slave society. Representative texts from classical authors will be examined in order to ascertain the main characteristics of Roman slavery; and students will be expected to conduct their own research topics. Some comparison of ancient (Greek and Roman) with modern slavery will be encouraged. NO(3-0)

**CLAS 346 (1½) ROMAN LAW AND SOCIETY**

An introduction to Roman law in its social context. Beginning with an outline of the sources and the historical development of Roman law, the course will give detailed attention to such aspects of Roman private law as the law of persons, property, marriage, labour, slavery and commerce. The emphasis throughout will be on the impact of law on Roman social relations. Attention will also be given to trial procedures in criminal cases, and the role of law in Roman public life. (Prerequisite: None, but 340 recommended) NO(3-0)

**CLAS 371 (H A 316) (1½) ART AND ARCHITECTURE OF ANCIENT GREECE AND THE AEGEAN**

An introduction to art and architecture in Greece and the Aegean from the Early Bronze Age through the Hellenistic period. Architecture, sculpture, and the minor arts are examined as evidence for cultural attitudes towards humankind, the gods, the physical world, and the exploration of form, color, and movement. Emphasis is placed on the careful discussion of selected monuments illustrated through slides, casts, and photographs. (No prerequisite) F(3-0)

**CLAS 372 (H A 317) (1½) ART AND ARCHITECTURE OF THE ROMAN WORLD**

A survey of Roman art and architecture relating the political and social development of the Roman people to their artistic expression. After an examination of Etruscan art and architecture for its formative influence on Roman attitudes, Republican and Imperial Roman art are discussed in the context of historical events. Topics include the special character of Roman art, Hellenized and Italic modes of expression, portraiture, historical reliefs, function in art, architectural space and city planning. (No prerequisite) S(3-0)

**CLAS 375 (1½) CITIES AND SANCTUARIES OF THE ANCIENT WORLD**

An examination of selected Greek, Etruscan and Roman city and sanctuary sites in an evaluation of ancient achievements in sacred and secular architecture, urban planning, and sanctuary development. Emphasis will be placed on the changing response to human needs for an artificial framework for living, along with the natural resources of the environment in antiquity. Each site will be examined by means of illustrated lectures, and careful consideration will be given to both the archaeological record and the ancient literary sources. (Offered alternately with 376) NO(3-0)

**CLAS 376 (1½) ANCIENT SCIENCE AND TECHNOLOGY**

An introduction to the scientific thought of the Greek and Roman world with special reference to applied technology. Evidence will be drawn from both ancient authors and archaeological remains from the Archaic period through the late Empire, with emphasis on the growth and capabilities of Roman Technology. Special topics will include machinery and gadgets, mass production, engineering, nautical technology, labour, medicine, and geography. (Offered alternately with 375) NO(3-0)



**CLAS 379 (PHIL 379) (1½) EARLY GREEK HISTORICAL AND PHILOSOPHICAL THOUGHT**

An investigation into the formation in Archaic and Classical Greece of such key concepts as rationality, causality, the nature-convention antithesis, law and equality, and female inferiority. These will be considered within the context of the society (from Hesiod to Herodotus) in which they evolved. The course does not presuppose a background in either classics or philosophy. NO(3-0)

**CLAS 380 (1½) THE LIFE AND TIMES OF SOCRATES**

An examination of a critical moment in Greek intellectual and political life, as seen from various points of view. Topics include: the teaching methods of Socrates and the Sophists, the political background of his trial, the religious and social questions involved, and types of Socratic literature. The approach to the course will not be primarily philosophical; rather, an attempt will be made to see why his challenge to conventional Athenian morality so deeply influenced his fellow citizens, and to explain why he appears as one of the most fascinating personalities of world history. Texts: Aristophanes *Clouds*, Plato *Euthyphro*, *Apology*, *Crito*, *Protagoras*, Xenophon *Memoirs of Socrates* and selections from other authors. NO(3-0)

**CLAS 381 (1½) ANCIENT RELIGIONS**

An introduction to classical religious thought and behaviour, with particular reference to Roman beliefs and practices. Topics will be selected by the instructor but will usually include traditional Roman religion, exotic cults in the Late Republic and Early Empire (e.g. Mithraism, Isis worship), and the rise of Christianity. Texts: Readings from Greek and Roman sources in translation, and secondary sources recommended by the instructor. F(3-0)

**CLAS 480 (1½) SEMINAR IN ANCIENT HISTORY AND ARCHAEOLOGY**

The Department will offer no more than two of the following each year: 480A Seminar in Greek History; 480B Topics in Greek Art and Archaeology; 480C Seminar in the History of the Roman World; 480D Topics in Roman Art and Archaeology. (*Pre-or corequisite*: for 480A, 330; for 480B, 371; for 480C, 340; for 480D, 372; or, in each case, permission of the Department)

|      |         |
|------|---------|
| 480A | NO(0-1) |
| 480B | NO(2-0) |
| 480C | S(2-0)  |
| 480D | F(2-0)  |

**CLAS 485 (1½) PRO-SEMINAR**

Members of the Department will collaborate in introducing the various sub-disciplines and methodologies of classical scholarship. This course must be taken once by all Honours and M.A. students. S(2-0)

**CLAS 490 (1½) DIRECTED STUDY IN GREEK HISTORY**

Intensive study of certain problems in Greek history. Students will be expected to prepare an extended research paper, drawing on both primary and secondary sources. Introduction to epigraphy, numismatics, and papyrology where appropriate. FS(2-0)

**CLAS 491 (1½) DIRECTED STUDY IN ROMAN HISTORY**

Intensive study of certain problems in Roman history. Students will be expected to prepare an extended research paper, drawing on both primary and secondary sources. Introduction to epigraphy, numismatics and papyrology where appropriate. FS(2-0)

**CLAS 492 (1½) DIRECTED STUDY IN CLASSICAL ARCHAEOLOGY**

Intensive study of selected problems in Classical Archaeology. Introduction to theory and techniques, with a focus on specific regions, periods, or cultures, according to student needs. Students are expected to prepare an extended research paper, drawing on excavation reports, ancient written sources, artifacts, and modern analyses, as appropriate. FS(2-0)

**CLAS 495 (3) ARCHAEOLOGY FIELD WORK SEMINAR**

An introduction to the methods and techniques of Classical Archaeology through participation in an excavation; introductory lectures will be arranged. (*Prerequisite*: Permission of the Department. Interested students should contact the department during the Winter Session.) Texts: Texts and requirements to be determined by the instructor according to circumstances of the excavation and student preparation. K(3-3)

**CLAS 499 (1½ or 3) GRADUATING ESSAY**

A graduating essay, written under the supervision of a faculty member, is required of fourth-year Honours students in Greek, Latin (both 1½ units), and Classical Studies (3 units). FSY

**GREEK****GREE 100 (3) BEGINNERS' GREEK**

A basic introduction to the Greek language, including the following: the three declensions of the noun; the regular, irregular and contracted verbs; a survey of verbs in *mi*; the main constructions; practice in translating sentences into Greek; sight translation. Tests and examinations will be given during the course of the year. Texts: *Reading Greek: Text and Grammar, Vocabulary and Exercises* Y(4-0)

**GREE 200 (3) GREEK LANGUAGE AND LITERATURE: I**

The emphasis will be on increased understanding of the language through a reading of selected authors. Example: Homer, Herodotus and Euripides. (*Prerequisite*: 100 or its equivalent) Texts: *Reading Greek: Text and Grammar, Vocabulary and Exercises; A World of Heroes*; Liddell and Scott, *Intermediate Greek-English Lexicon*; Goodwin and Gulick, *Greek Grammar* Y(4-0)

**GREE 250 (1½) NEW TESTAMENT GREEK**

A study of the language of the New Testament. Selections from the Gospels and from *Acts of the Apostles* will be read. (*Prerequisite*: 100) Text: *The Greek New Testament*, ed. Aland, Black, et al. (United Bible Societies) NO(3-0)

**GREE 300 (3) GREEK LANGUAGE AND LITERATURE: II**

The basic third year course for Major and Honours students; advanced Greek students may take the course in their second year. Selected texts (to be varied to some extent from year to year) will be studied from prose and verse authors. Considerable emphasis will be placed on the ability to translate with accuracy and imagination, particularly from Greek into English. Unprepared translation will be included in the final examination. (*Prerequisite*: 200) Texts: The readings alternate on a two year cycle. In year A, readings are taken from the advanced volumes of the Cambridge reading program; in year B, there will be selections from: Sophocles, *Oedipus Tyrannus*, Euripides, *Medea*, Thucydides, *History*, Plato, *Dialogues* (NOTE: 300 will be taught together with 400.) Y(3-0)

**GREE 390 (1½) GREEK AUTHORS**

Extensive reading and analysis of major Greek texts. The Department will offer no more than two of the following each year: 390A Homer; 390B Greek Tragedy; 390E Greek Historians; 390F Plato; 390G Comedy; 390H Orators. (*Prerequisite*: 200)

|       |         |
|-------|---------|
| 390A: | S(3-0)  |
| 390B: | NO(3-0) |
| 390E: | NO(3-0) |
| 390F: | NO(3-0) |
| 390G: | NO(3-0) |
| 390H: | NO(3-0) |

**GREE 400 (3) GREEK LANGUAGE AND LITERATURE: III**

The basic fourth year course for Honours students. Sight translation will be regularly practised, and unprepared translation will be included in the final examination. (*Prerequisite*: 300) Texts: see 300 (NOTE: Although this course will be taught together with Greek 300, there will be separate evaluative procedures.) Y(3-0)

**GREE 490 (1½) DIRECTED STUDIES IN GREEK**

Depending on the students' interests and the availability of a supervising instructor, one or more of the following topics may be offered: 490A Homeric Corpus and Hesiod; 490B Greek Lyric Poetry; 490C Greek Tragedy; 490D Greek Comedy; 490E Greek Historians and Rhetoricians; 490F Greek Philosophical Prose; 490G Hellenistic Poetry. May be taken more than once, to a maximum of 3 units, for credit in different topics. (*Prerequisite*: Completion of at least 3 units of Greek at the 300 level or above, and Department permission) FS(2-0)



**LATIN**

Students with no previous study of Latin or one year of high school Latin will register for LATI 100. Students with two or three years of high school Latin will normally register for LATI 200. All students who have taken high school Latin should consult the Department before enrolling in any Latin course.

**LATI 100 (3) BEGINNERS' LATIN**

No previous knowledge of Latin is required. An introduction to the Latin language with easy readings from Roman authors. Y(4-0)

All work at the 200 level or beyond will require a *Cassell's New Latin Dictionary* and Allen and Greenough, *New Latin Grammar*.

**LATI 200 (3) LATIN LANGUAGE AND LITERATURE: I**

The emphasis will be on an increased understanding of the language through a reading of the authors. (*Prerequisite*: 100 or equivalent) Y(4-0)

**LATI 300 (3) LATIN LANGUAGE AND LITERATURE: II**

The basic third year course for Major and Honours students; advanced Latin students may take the course in their second year. The aims will include the development of critical judgement and the appreciation of literary style, through the study of major writers in Latin poetry and prose. Considerable emphasis will be placed on the ability to translate with accuracy and imagination, particularly from Latin into English. Students will be expected to practise reading aloud from the authors selected, and may be examined on their competence. Unprepared translation will be included in the final examination. (*Prerequisite*: 200) Texts: The readings alternate on a two year cycle. Year A, Cicero, *Pro Caelio*, Horace, *Odes*, Tacitus (selections), Juvenal, *Satires* 1, 3 and 10. Year B, selections from Cicero's *Letters*, Lucretius, *De Rerum Natura*, Ovid, and Seneca (NOTE: 300 will be taught together with 400.) Y(3-0)

**LATI 350 (MEDI 350) (1½) (formerly LATI 250) MEDIEVAL LATIN**

After an introduction to medieval Latin grammar, the course will explore the varied tradition of medieval Latin literature, from St.

Augustine's *Confessions* to Petrarch's letters, from theological discourses to drinking and love songs, from crusade chronicles to ghost stories. Passages will be read and discussed in the context of medieval culture and society. Students with credit in MEDI 250 cannot receive credit for LATI 350. (*Prerequisite*: LATI 200 or equivalent) NO(3-0)

**LATI 390 (1½) LATIN AUTHORS**

Extensive reading and analysis of major Latin texts. The Department will offer no more than two of the following each year: 390A Vergil, *Eclogues and Georgics*; 390B Vergil, *Aeneid*; 390C Horace; 390D Roman Historians. (*Prerequisite*: 200)

|       |         |
|-------|---------|
| 390A: | NO(3-0) |
| 390B: | NO(3-0) |
| 390C: | NO(3-0) |
| 390D: | F(3-0)  |

**LATI 400 (3) LATIN LANGUAGE AND LITERATURE: III**

The basic fourth year course for Honours students. The aims will be similar to those of LATI 300, on a more advanced level. There will be examinations of syntax, metre and stylistics. Sight translation from more difficult authors will be regularly practised, and unprepared translation will be included in the final examination. (*Prerequisite*: 300) Texts: see 300 (NOTE: Although this course will be taught together with 300, there will be separate evaluative procedures.) Y(3-0)

**LATI 490 (1½) DIRECTED STUDIES IN LATIN**

Depending on the student's interests and on the availability of a supervising instructor, one or more of the following topics may be offered: 490A Roman Comedy and Satire; 490B Roman Philosophical Literature; 490C Prose Authors of the Late Republic; 490D Late Republican and Augustan Poetry; 490E Post-Augustan Poetry; 490F Roman Historians; 490G Post-Augustan Prose. (May be taken more than once for credit in different topics) (*Prerequisite*: Completion of at least 3 units of Latin at the 300 level or above, and permission of the Department) FS(2-0)

## DEPARTMENT OF COMPUTER SCIENCE

### 1.0 PROGRAMS

The main Calendar entry for the Department of Computer Science is located in the Faculty of Engineering section of this Calendar.

The Department of Computer Science offers programs of study leading to the following degrees:

- Faculty of Engineering: B.Sc. Major or Honours in Computer Science; B.Sc. Major in Computer Science (Business Option);
- Faculty of Arts and Science: B.Sc. Major or Honours in Combined Computer Science and Mathematics, and Computer Science and Statistics; B.A. or B.Sc. General Degree in Computer Science;
- Faculty of Graduate Studies: M.A., M.Sc., Ph.D.

For details of graduate programs in Computer Science, see page 309. For undergraduate courses, see page 210.

### 2.0 LIMITATION OF ENROLLMENT

Students are advised that, because of limited facilities and staff it may be necessary to limit enrollment in certain Computer Science courses. Enrollment in Computer Science 100, 110, 115 and 200 will be on a first come, first served basis. Enrollment limits in all other courses will be imposed where necessary on the basis of facilities available and academic standing in prerequisite courses. Students are warned that achieving the minimum academic standing outlined in specific course descriptions does not guarantee entry into those courses. Students with a B- or higher grade in prerequisite courses will in most instances have no difficulty gaining admission to following courses.

### 3.0 UNDERGRADUATE PROGRAMS

Undergraduate courses offered by the Department of Computer Science may be taken by all students in the Faculty of Arts and Science for credit toward a degree in this Faculty.

All first year students wishing to complete a degree in Computer Science register in the Faculty of Arts and Science. Students planning to complete a Major or Honours degree in Computer Science register in the Faculty of Engineering upon declaring their degree program. Students planning to complete one of the Combined degree programs offered by Computer Science, and Mathematics and Statistics, or a General program involving Computer Science, continue to be registered in the Faculty of Arts and Science. Students planning to complete a double Major or double Honours degree in Computer Science and another discipline may choose to register in the Faculty of Engineering or the Faculty of the other discipline.

Students planning to complete a degree with a Computer Science designation must inform the Department of this fact before registering for third year by completing a Degree Intention Form which may be obtained from the Computer Science Coop/Advising Office. They must also file a Record of Degree Program form before registering for third year in the Faculty of Engineering or during third year in the case of the Faculty of Arts and Science. For the Faculty of Arts and Science, Degree Programs are submitted to the Arts and Science Advising Centre. For the Faculty of Engineering, Computer Science Degree Programs are submitted to the Computer Science Coop/Advising Office.

### 4.0 MAJOR AND HONOURS DEGREE REQUIREMENTS

The requirements for the Major and Honours B.Sc. degree in Computer Science and the Major B.Sc. degree in Computer Science (Business Option) are found in the Engineering section of this Calendar.



## 5.0 GENERAL DEGREE REQUIREMENTS

| Year     |  |
|----------|--|
| I        | C SC 110/115<br>MATH 100/101 or 102/151<br>MATH 224                                  |
| II       | C SC 212/225/230/265<br>STAT 252 or 254 or 255 or 260 or ECON 246                    |
| III & IV | A total of nine additional units of Computer Science courses numbered 300 or higher. |

Students in the Faculty of Arts and Science may complete a Minor in Computer Science by completing the General program requirements in conjunction with the Major or Honours program requirements in another Department in the Faculty.

## 6.0 COMBINED PROGRAMS IN COMPUTER SCIENCE AND MATHEMATICS/COMPUTER SCIENCE AND STATISTICS

For a B.Sc. degree in Combined Computer Science and Mathematics, or Computer Science and Statistics students may take a Major or Honours program. These programs are not joint degrees in Computer Science and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for any of these combined programs must contact the Computer Science and Mathematics and Statistics Departments and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Computer Science, Mathematics or Statistics must consult with their advisers prior to making their final choice of courses.

### 6.1 Admission to Honours

Students who wish to be admitted to one of the Combined Honours programs should apply in writing to the Chairs of the Departments on completion of their second year. Normally a student will be admitted to the Combined Honours program only if the student meets the following conditions: completion of C SC 110, 115, 212, 225, 230, and 265; completion of at least 10.5 units of the Mathematics and Statistics courses required for the degree; attainment of a grade of at least B+ in all 200 level Computer Science courses; attainment of a grade point average of at least 6.50 in all 200 level Mathematics and Statistics courses.

Students may also apply and be admitted to one of the Combined Honours programs upon completion of their third year providing:

- they have completed all of the 100 level and 200 level courses required for the relevant Combined Honours degree with a grade point average of at least 6.00 in these courses, and
- they have completed at least 4.5 units of 300 level courses in Computer Science (including C SC 320 and 349A) and 4.5 units in Mathematics and Statistics (including MATH 333A and 334 for the Mathematics option, or STAT 350 and 353 for the Statistics option) and have obtained a grade point average of at least 6.00 in all 300 level Computer Science, Mathematics, and Statistics courses taken.

Honours students are expected to maintain a grade point average of at least 5.00 in their third year to remain in the program.

A student graduating in the combined Honours program will be recommended for an Honours degree with Distinction if the student achieves a graduating average of 6.50 or greater.

A student who does not obtain a grade point average of 6.50 will be recommended for an Honours degree if the student achieves a graduating average of at least 5.00.

### 6.2 Combined Programs in Computer Science and Mathematics

| Year | B.Sc. Major   | B.Sc. Honours   |
|------|---|---|
| I    | C SC 110/115 (3)<br>MATH 100/101/224 (4½)<br>ENGL 115,<br>ENGR 240 <sup>1</sup> (3)<br>Electives (4½) | C SC 110/115 (3)<br>MATH 100/101/224 (4½)<br>ENGL 115,<br>ENGR 240 <sup>1</sup> (3)<br>Electives (4½) |

|     |   |   |
|-----|---|---|
| II  | C SC 212/225/<br>230/265 (6)<br>MATH 200/201/<br>233A/233C/324 (7½)<br>STAT 260 <sup>2</sup> (1½)   | C SC 212/225/<br>230/265 (6)<br>MATH 200/201/<br>233A/233C/324 (7½)<br>STAT 260 <sup>2</sup> (1½)     |
| III | C SC 320/326/<br>349A/349B (6)<br>MATH 330A/330B/<br>333A (4½)<br>One of MATH 333C/<br>422/423 (1½)<br>STAT 261 (1½)<br>Other Courses <sup>3</sup> (1½) | C SC 320/326/<br>349A/349B (6)<br>MATH 333A/333C/<br>334/338/434 (7½)<br>STAT 261 (1½)                |
| IV  | Other Courses <sup>3</sup> (15)   | C SC 499 (1½)<br>Two of C SC 425/<br>445/449/484 <sup>4</sup> (3)<br>Other Courses <sup>4</sup> (10½) |

<sup>1</sup> ENGL 225 can be substituted for ENGR 240 but this requires 3 units of first year English.

<sup>2</sup> STAT 260 may be taken in the second term of the first year.

<sup>3</sup> These 16½ units of other courses must include at least 9 units from the Departments of Computer Science and Mathematics and Statistics at the 300 level or above, with at least 6 of these units at the 400 level. In selecting these courses, students are urged to take at least 3 of these units in each of the two departments.

<sup>4</sup> These 10½ units of other courses must include at least 1½ units at the 300 level or above and 4½ units at the 400 level from the Departments of Computer Science and Mathematics and Statistics (to include at least 1½ units from the Department of Mathematics and Statistics at the 400 level).

### 6.3 Combined Programs in Computer Science and Statistics

| Year | B.Sc. Major   | B.Sc. Honours   |
|------|---|---|
| I    | C SC 110/115 (3)<br>MATH 100/101/224 (4½)<br>ENGL 115,<br>ENGR 240 <sup>1</sup> (3)<br>Electives (4½)               | C SC 110/115 (3)<br>MATH 100/101/224 (4½)<br>ENGL 115,<br>ENGR 240 <sup>1</sup> (3)<br>Electives (4½)   |
| II   | C SC 212/225/<br>230/265 (6)<br>MATH 200 (or 205)/<br>201/233A (4½)<br>STAT 260/261 (3)<br>Electives (1½)           | C SC 212/225/<br>230/265 (6)<br>MATH 200 (or 205)/<br>201/233A (4½)<br>STAT 260/261 (3)<br>Electives (1½)   |
| III  | C SC 320/326/<br>349A/349B (6)<br>MATH 324 (1½)<br>STAT 350/353 <sup>2</sup> (3)<br>Other Courses <sup>2</sup> (4½) | C SC 320/326/<br>349A/349B (6)<br>MATH 324 (1½)<br>STAT 350/353 <sup>2</sup> (3)<br>Other Courses <sup>2</sup> (4½)   |
| IV   | Three of STAT 354,<br>450, 453, 454 <sup>3</sup> (4½)<br>Other Courses <sup>2</sup> (10½)                           | Two of C SC 425/445/<br>446/449/484 (3)<br>C SC 499 (1½)<br>STAT 450 (1½)<br>Three of MATH 452,<br>STAT 354, 453,<br>454 <sup>3</sup> (4½)<br>Other Courses <sup>4</sup> (4½) |

<sup>1</sup> ENGL 225 can be substituted for ENGR 240 but this requires 3 units of first year English.

<sup>2</sup> These 15 units of other courses must include at least 3 units of Computer Science at the 400 level and at least 4½ additional units of Computer Science, Mathematics or Statistics at the 300 level or higher. In selecting these latter 4½ units, students are encouraged to take at least one course from each of the two Departments.

<sup>3</sup> STAT 454 can be taken more than once in different topics.

<sup>4</sup> These 9 units of other courses must include at least 4½ units of Computer Science, Mathematics or Statistics at the 300 level or higher. In selecting these courses, students are encouraged to take at least one course from each of the two Departments.



**6.4 NOTES:**

- (1) All students taking a degree in Computer Science are strongly advised to take some University courses outside the Computer Science and Mathematics and Statistics Departments.
- (2) Any students who demonstrate to the Department that they have mastered the material of a course may be granted advanced placement.
- (3) Students from outside British Columbia, students transferring from community colleges and students who have obtained credit for Grade XIII Mathematics must consult the Department before enrolling in any Computer Science course.
- (4) In each line below students may obtain credit for only one Computer Science course.

112 or 212  
115 or 160  
250 or 355  
370 or 470  
425 or 420  
435 or 471  
448A or 445  
448B or 446

## 7.0 COMBINED COMPUTER SCIENCE/MATHEMATICS COOPERATIVE EDUCATION PROGRAM

Students are normally admitted to the Computer Science/Mathematics Cooperative Education Program in January after their first term on campus, and application for admission should be made before the end of the first term. However, in exceptional circumstances, students may be admitted to the program up to the end of their second year. In their third year, students may opt for a degree program in either Computer Science or Mathematics and Statistics and will enter the Coop program in that department. Students who opt for a Combined degree in Computer Science and Mathematics or Computer Science and Statistics or for a Double Major or Double Honours in Computer Science and Mathematics or Computer Science and Statistics will remain in the Combined Computer Science/Mathematics Coop.

The requirements of the Computer Science Cooperative Education Program are described on page 212 of this calendar.

## SCHOOL OF EARTH AND OCEAN SCIENCES

Christopher R. Barnes, B.Sc. (Birm.), Ph.D. (Ott.), F.R.S.C., Professor and Director of the School

James Bishop, B.Sc. (Brit. Col.), D.Sc. (M.I.T.), Professor

Norman R. Chapman, B.Sc. (McM.), Ph.D. (Brit. Col.), Professor

Inez Fung, B.S., D.Sc. (M.I.T.), Professor

Christopher J.R. Garrett, B.A., Ph.D. (Cantab.), F.R.S., F.R.S.C., Lansdowne Professor of Ocean Physics

David F. Strong, B.Sc. (Nfld.), M.Sc. (Lehigh), Ph.D. (Edin.), F.R.S.C., Professor

Verena J. Tunnicliffe, B.Sc. (McM.), M. Phil., Ph.D. (Yale), F.R.S.C., Professor

John T. Weaver, B.Sc. (Brist.), M.Sc., Ph.D. (Sask.), Professor

Eileen Van der Flier-Keller, B.A. (Dub.), Ph.D. (W. Ont.), Associate Professor

Andrew J. Weaver, B.Sc. (U. of Vic.), Ph.D. (Brit. Col.), Associate Professor

Michael J. Whittar, B.Sc. (Brit. Col.), Ph.D. (Christian Albrechts), Associate Professor

Dante Canil, B.Sc. (Windsor), Ph.D. (Alta.), Assistant Professor

Kathryn M. Gillis, B.Sc. (Queen's), Ph.D. (Dal.), Assistant Professor

George D. Spence, B.Sc. (Calg.), M.Sc., Ph.D. (Brit. Col.), Assistant Professor

Karen Drysdale, B.A. (Colo.), M.Sc. (Brit. Col.), Senior Laboratory Instructor

Teresa Russell, Administrative Officer

### Visiting, Adjunct and Cross-listed Appointments:

George J. Boer, B.Sc. (Brit. Col.), M.A. (Tor.), Ph.D. (Mass.), Adjunct Professor (1994-96)

Brian D. Bornhold, B.Sc. (Wat.), M.A. (Duke), Ph.D. (M.I.T.), Adjunct Professor (1993-95)

Eddie C. Carmack, B.Sc. (Ariz. St.), Ph.D. (Wash.), Adjunct Professor (1993-95)

William R. Crawford, B.Sc., M.Sc. (Wat.), Ph.D. (Brit. Col.), Adjunct Professor (1994-96)

Kenneth L. Denman, B.Sc. (Calg.), Ph.D. (Brit. Col.), Adjunct Professor (1994-96)

Harry W. Dosso, B.A., M.Sc., Ph.D. (Brit. Col.), Professor (Physics and Astronomy) (1991-95)

David M. Farmer, B.Com., M.Sc. (McG.), Ph.D. (Brit. Col.), F.R.S.C., Adjunct Professor (1993-95)

Howard J. Freeland, B.A. (Essex), Ph.D. (Dal.), Adjunct Professor (1993-95)

Roy D. Hyndman, B.A.Sc., M.A.Sc. (Brit. Col.), Ph.D. (A.N.U.), F.R.S.C., Adjunct Professor (1994-96)

Edward Irving, B.A., M.A., Sc.D. (Cantab.), D.Sc. (Car.), F.R.S., F.R.S.C., Adjunct Professor (1994-96)

E. Lyn Lewis, B.Sc., M.Sc., Ph.D. (Lond.), Adjunct Professor (1993-95)

Rolf Ludvigsen, B.Sc. (Calg.), M.Sc., Ph.D. (W. Ont.), Adjunct Professor (1993-95)

Rolf G. Lueck, B.A.Sc., Ph.D. (Brit. Col.), Adjunct Professor (1995-98)

Norman McFarlane, B.Sc. (Alta.), M.Sc. (McG.), Adjunct Professor (1994-96)

Garry C. Rogers, B.Sc. (Brit. Col.), M.Sc. (Hawaii), Ph.D. (Brit. Col.), Adjunct Professor (1994-96)

Robert W. Stewart, B.Sc., M.Sc. (Queen's), Ph.D. (Cantab.), F.R.S., F.R.S.C., Adjunct Professor (1994-96)

Peter Wangersky, B.Sc. (Brown), Ph.D. (Yale), Adjunct Professor (1993-95)

C. S. Wong, B.Sc., M.Sc. (Hong Kong), Ph.D. (Scripps Inst. Oceanography), Adjunct Professor (1994-96)

Christopher Yorath, B.Sc. (Brit. Col.), M.Sc. (Alta.), Ph.D. (Queen's), Adjunct Professor (1993-95)

J. Vaughn Barrie, B.Sc., M.Sc., Ph.D. (Wales), Adjunct Associate Professor (1993-95)

John C. Fyfe, B.Sc. (Regina), Ph.D. (McG.), Adjunct Associate Professor (1994-96)

John R. Harper, B.Sc. (Mass.), M.Sc., Ph.D. (Louisiana St.), Adjunct Associate Professor (1993-95)

Richard J. Hebda, B.Sc. (McM.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1993-95)

Louis A. Hobson, B.S. (Humboldt St. Coll.), M.S., Ph.D. (Wash.), Associate Professor (Biology) (1993-95)

Greg Holloway, B.A., M.S. (Calif., San Diego), Ph.D. (Scripps), Adjunct Associate Professor (1993-95)

C. Peter Keller, B.A. (Dublin), M.A., Ph.D. (W. Ont.), Associate Professor (Geography) (1992-95)

David L. Mackas, B.S., M.S. (Wash.), Ph.D. (Dal.), Adjunct Associate Professor (1993-95)

Peter T. Bobrowsky, B.A., B.Sc. (Alta.), M.A. (S. Fraser), Ph.D. (Alta.), Adjunct Assistant Professor (1993-95)

Patrick F. Cummins, B.Eng. (Conc.), M.Sc., Ph.D. (Brit. Col.), Adjunct Assistant Professor (1994-96)

The School offers the following B.Sc. degree programs: General, Major and Honours in Earth Sciences; Combined Major and Honours in Physics and Earth Sciences (Geophysics); Combined Major and Honours in Physics and Ocean Sciences (Physical Oceanography).



The Earth Sciences programs require a core of earth science courses, co-requisite courses in the other sciences and a selection of electives suited to the interests of individual students. The Honours program requires undergraduates to undertake a research project, including the writing of an Honours thesis. The School of Earth and Ocean Sciences also offers Honours and Combined Major programs in collaboration with the Department of Physics and Astronomy. These programs provide specialization in either Geophysics or Physical Oceanography, and allow students to apply basic principles of physics and mathematics to fundamental global processes affecting the earth and oceans. For other areas of study, students may take a Minor program in Earth and Ocean Science along with a Major or Honours program in another discipline. Such interdisciplinary programs may be advantageous to students considering a postgraduate degree in Environmental Studies, Geophysics, Oceanography, Atmospheric Sciences or Education. Students intending to pursue research or continue their studies for M.Sc. or Ph.D. degrees should consider the Honours programs.

The distinctive character of B.Sc. General Programs is the breadth of course options possible. Students in these programs may wish to combine a concentration in Earth Sciences with one in another science area (B.Sc.) or an arts area (B.A.).

### EARTH SCIENCES

| B.Sc. Major or Honours               |      | B.Sc. General         |       |
|--------------------------------------|------|-----------------------|-------|
| First Year                           |      | First Year            |       |
| EOS 100/101                          | (3)  | EOS 100/101           | (3)   |
| BIOL 150A                            | (1½) | BIOL 150A             | (1½)  |
| CHEM 101/102                         | (3)  | CHEM 101/102          | (3)   |
| MATH 100/101                         | (3)  | MATH 100/101          | (3)   |
| PHYS 112                             | (3)  | PHYS 112              | (3)   |
| Elective                             | (1½) | Elective              | (1½)  |
|                                      | 15   |                       | 15    |
| Second Year                          |      | Second Year           |       |
| EOS 201                              | (1½) | EOS 201               | (1½)  |
| EOS 202                              | (1½) | EOS 202               | (1½)  |
| EOS 240                              | (1½) | EOS 240               | (1½)  |
| CHEM 222/245                         | (3)  | CHEM 222/245          | (3)   |
| MATH 200 (or 205)/201                | (3)  | MATH 200 or (205)/201 | (3)   |
| PHYS 210                             | (1½) | PHYS 210              | (1½)  |
| Elective                             | (3)  | Elective              | (3)   |
|                                      | 15   |                       | 15    |
| Third Year                           |      | Third Year            |       |
| EOS 300                              | (1½) | EOS 300               | (1½)  |
| EOS 310                              | (1½) | EOS 310               | (1½)  |
| EOS 320                              | (1½) | EOS 320               | (1½)  |
| EOS 330                              | (1½) | EOS 330               | (1½)  |
| EOS 340                              | (1½) | EOS 340               | (1½)  |
| *BIOL 311A/B                         | (3)  | Electives             | (7½)  |
| STAT 260                             | (1½) |                       | 15    |
| Elective                             | (3)  |                       |       |
|                                      | 15   |                       |       |
| Fourth Year                          |      | Fourth Year           |       |
| EOS 400                              | (1½) | One of EOS 410, 440   |       |
| EOS 410                              | (1½) | or 460                | (1½)  |
| EOS 440                              | (1½) | Electives             | (13½) |
| EOS 460                              | (1½) |                       | 15    |
| EOS 499 (Honours only)               | (3)  |                       |       |
| One of EOS 420, 450, 470, 480 or 490 | (1½) |                       |       |
| Electives:                           |      |                       |       |
| Major                                | (7½) |                       |       |
| Honours                              | (4½) |                       |       |
|                                      | 15   |                       |       |
| Total electives:                     |      | Total electives       | 25½   |
| Major                                | 15   |                       |       |
| Honours                              | 12   |                       |       |
| Total units                          | 60   | Total units           | 60    |

\* We recommend that you take the prerequisites for this course as a component of your electives. You may only register in BIOL 311A/B if you have either the prerequisites or a third year standing.

### PHYSICS AND EARTH SCIENCES (GEOPHYSICS) PHYSICS AND OCEAN SCIENCES (PHYSICAL OCEANOGRAPHY)

In the first and second years, sequences A and B are for students who begin the programs with PHYS 120 or PHYS 112, respectively. Both the Combined Major and Honours programs are the same in the first year.

#### First Year

| A              |      | B              |      |
|----------------|------|----------------|------|
| EOS 100/101    | (3)  | EOS 100/101    | (3)  |
| PHYS 120/220   | (3)  | PHYS 112       | (3)  |
| MATH 100/101   | (3)  | MATH 100/101   | (3)  |
| CHEM 101/102   | (3)  | CHEM 101/102   | (3)  |
| CSC 110 or 112 | (1½) | CSC 110 or 112 | (1½) |
| Elective       | (1½) | Elective       | (1½) |
| Total:         | 15   | Total:         | 15   |

#### Physics and Earth Sciences (Geophysics)

#### Second Year

| B.Sc. Combined Major |      | B            |      |
|----------------------|------|--------------|------|
| A                    |      |              |      |
| EOS 201/202          | (3)  | EOS 201/202  | (3)  |
| PHYS 214/215         | (3)  | PHYS 220     | (1½) |
| PHYS 210/216         | (3)  | PHYS 214/215 | (3)  |
| MATH 200/201         | (3)  | PHYS 210/216 | (3)  |
| CHEM 245             | (1½) | MATH 200/201 | (3)  |
| Elective             | (1½) | CHEM 245     | (1½) |
| Total:               | 15   | Total:       | 15   |

#### B.Sc. Honours

| A            |      | B            |      |
|--------------|------|--------------|------|
| EOS 201/202  | (3)  | EOS 201/202  | (3)  |
| PHYS 214/215 | (3)  | PHYS 220     | (1½) |
| PHYS 210/216 | (3)  | PHYS 214/215 | (3)  |
| MATH 200/201 | (3)  | PHYS 210/216 | (3)  |
| MATH 233A/B  | (3)  | MATH 200/201 | (3)  |
| CHEM 245     | (1½) | MATH 233A/B  | (3)  |
|              |      | CHEM 245     | (1½) |
| Total:       | 16½  | Total:       | 18½  |

#### Third Year

| B.Sc. Combined Major |      | B.Sc. Honours   |      |
|----------------------|------|-----------------|------|
| EOS 300 (1½)         |      | EOS 300         | (1½) |
| EOS 310/320          | (3)  | EOS 310/320     | (3)  |
| PHYS 325/326         | (3)  | PHYS 325/326    | (3)  |
| PHYS 317             | (1½) | PHYS 317        | (1½) |
| MATH 330A/B          | (3)  | PHYS 321A/B     | (3)  |
| MATH 323 or 325      | (1½) | MATH 330A/B     | (3)  |
| MATH 326             | (1½) | MATH 323 or 325 | (1½) |
|                      |      | MATH 326        | (1½) |
| Total:               | 15   | Total:          | 18   |

#### Fourth Year

| B.Sc. Combined Major |      | B.Sc. Honours          |      |
|----------------------|------|------------------------|------|
| EOS 410              | (1½) | EOS 410/480            | (3)  |
| PHYS 411/427         | (3)  | EOS 499                | (3)  |
| PHYS 413A            | (1½) | EOS 430 or PHYS 413B   | (1½) |
| EOS 430 or PHYS 413B | (1½) | PHYS 411/427           | (3)  |
| Electives            | (7½) | PHYS 413A              | (1½) |
|                      |      | PHYS 460               | (0)  |
|                      |      | Electives (EOS & PHYS) | (6)  |
| Total: 15            |      | Total:                 | 18   |

□ In sequence B of the Honours program, PHYS 210 or 214 may be deferred to third year, and PHYS 317 should then be deferred to fourth year. Total units in second year would then be 16½.

□ 6 units of electives (4½ if PHYS 317 is deferred to fourth year) chosen from PHYS 410, 426, 431; EOS 440, 460, 470



**Physics and Ocean Sciences (Physical Oceanography)****Second Year**

B.Sc. Combined Major and B.Sc. Honours

| A            |      | B            |      |
|--------------|------|--------------|------|
| EOS 340      | (1½) | EOS 340      | (1½) |
| PHYS 214/215 | (3)  | PHYS 214/215 | (3)  |
| PHYS 216     | (1½) | PHYS 220/216 | (3)  |
| MATH 200/201 | (3)  | MATH 200/201 | (3)  |
| *MATH 233A/B | (3)  | *MATH 233A/B | (3)  |
| Electives    | (3)  | Elective     | (1½) |
| Total:       | 15   |              | 15   |

**Third Year**

B.Sc. Combined Major

| A               |      | B               |      |
|-----------------|------|-----------------|------|
| PHYS 317        | (1½) | PHYS 317        | (1½) |
| PHYS 321A       | (1½) | PHYS 321A/B     | (3)  |
| PHYS 325/326    | (3)  | PHYS 325/326    | (3)  |
| MATH 330A/B     | (3)  | PHYS 413A/B     | (3)  |
| MATH 323 or 325 | (1½) | MATH 330A/B     | (3)  |
| MATH 326        | (1½) | MATH 323 or 325 | (1½) |
| Electives       | (3)  | MATH 326        | (1½) |
| Total:          | 15   | Elective        | (1½) |

**Fourth Year**

B.Sc. Combined Major

| A              |      | B                        |      |
|----------------|------|--------------------------|------|
| EOS 431        | (1½) | EOS 431                  | (1½) |
| EOS 433 or 435 | (1½) | EOS 432 or 435           | (1½) |
| PHYS 411/426   | (3)  | PHYS 411/426             | (3)  |
| PHYS 413A/B    | (3)  | PHYS 410/422             | (3)  |
| Electives      | (6)  | PHYS 460                 | (0)  |
|                |      | **Electives (EOS & PHYS) | (9)  |
| Total:         | 15   |                          | 18   |

\* Recommended, but not required of, Combined Majors students

\*\* 3 units of electives chosen from EOS 499, PHYS 429A, PHYS 429B

3 units of electives chosen from EOS 432, 433, 434, 435

3 units of electives chosen from Physics courses numbered 300 or higher

**Honours in Earth Sciences**

Students who wish to be admitted to one of the Honours programs should apply to the Director of the School on completion of their second year. The general requirements for admission to the third year of the Honours program are specified above. Normally, admission to the Honours program requires at least a second class average in each of the first two undergraduate years. The minimum requirement for admission to the fourth year is a second class average overall in the work of the third year.

A student in the Earth Sciences Honours program is required to meet the general regulations of the University on pages 17 to 23 of this Calendar. If a student fails to meet the standards for the Honours degree, while meeting the Major degree requirements, the School may recommend the appropriate class of Major degree.

**Honours in Physics and Earth Sciences (Geophysics) and Honours in Physics and Ocean Sciences (Physical Oceanography)**

Admission to the Honours Physics and Earth Sciences (Geophysics) Program and the Honours Physics and Ocean Science (Physical Oceanography) Program requires the permission of both the Department of Physics and Astronomy and the School of Earth and Ocean Sciences.

**Field Courses**

Earth Sciences 300 and 400 are usually scheduled outside of the normal term time at off-campus locations on dates specified by the School. Students may be required to meet part of the expenses involved and will be advised of such expenses during the first week of classes in the Fall Term.

**EARTH AND OCEAN UNDERGRADUATE PROGRAMS**

Students should consult the Director concerning courses offered in any particular year. The timetable also shows which courses are offered.

The names of faculty instructing courses, together with the required and recommended texts for each course, may be obtained from the School.

(Course offering codes: Y = September-April; F = September-December; S = January-April; K = May-August; NO = Not offered, this session.)

**UNDERGRADUATE COURSES**

**Note:** EOS 100 and 101 are prerequisites to all other Earth and Ocean courses.

**EOS 100 (formerly GEOL 100A) (1½) EARTH, OCEAN AND ATMOSPHERE**

An introduction to the basic concepts and topical problems in geology, geophysics, oceanography and atmospheric sciences. Included will be the underlying principles and nature of erosional and depositional systems, modern plate tectonic processes, wind and current systems, air-sea interactions, weather patterns, El Niño and climate change. Laboratory work will include field trips to local institutions and study sites. (3-3)

**EOS 101 (formerly GEOL 100B) (1½) EARTH'S HISTORY**

An introduction to the geological, geophysical and geochemical evidence bearing on the evolution of continents and ocean basins and their relationship to the earth's interior. The nature of earthquakes, volcanoes, mountain ranges and natural resources, with particular reference to the Pacific rim. The past and future history of the earth as inferred from the geological record. (Prerequisite: 100) (3-3)

**EOS 201 (formerly GEOL 201) (1½) SEDIMENTARY GEOLOGY**

The physical, chemical and biological nature of sediments at sea and on land. The process of sediment transport, deposition and diagenesis. The origin and internal stratigraphy of sedimentary basins in the context of plate tectonics. The sedimentary record as used to reconstruct past climates, geographies, and earth and ocean dynamics. The geological evolution of western Canada as deduced from its stratigraphic record. (Prerequisites: 100 and 101) (3-3)

**EOS 202 (formerly GEOL 202) (1½) STRUCTURAL GEOLOGY**

The fault, fold and ductile flow systems accompanying deformation of the earth's crust. Extensional, contractional and toroidal deformation. Geometric, kinematic and mechanical analysis of deformational structures of different scales. Techniques and assumptions used in the construction of structural cross-sections. The origin of crustal deformation zones in the context of plate tectonics. The geological evolution of western Canada as deduced from its structural history. (Prerequisites: 100 and 101) (2-3)

**EOS 240 (formerly EOS 360) (1½) GEOCHEMISTRY**

The thermodynamic and kinetic approaches to understanding earth processes. Application of theory to practical questions such as mineral formation, weathering, and petroleum formation. Minor treatment is given to shorter term ocean and atmospheric and longer term Earth history geochemistry. (Prerequisites: 100 and 101; Pre- or corequisites: CHEM 222 and 245) (3-3)

**EOS 300 (formerly GEOL 310) (1½) EARTH SCIENCE FIELD SCHOOL**

A two-week field course in Western Canada, during which the students will be introduced to: geological mapping (including traversing, sampling, prospecting and acquisition of geological data), the major geologic and tectonic provinces, and the use of geophysical equipment. Normally held in late April - early May after examinations for Year 2. (Prerequisites: 201 and 202)

**EOS 310 (1½) IGNEOUS GEOLOGY**

The physical, chemical and isotopic nature of melt generation in the earth's mantle and crust. The processes of melt transport, fractionation and hybridization. The cooling, crystallization and solidification of melts within the earth and during volcanic eruptions. The origin of melt zones and their characteristics in the context of plate tectonics. The geological evolution of western Canada as deduced from its magmatic history. (Prerequisite: 240) (3-3)



**EOS 320 (1½) METAMORPHIC GEOLOGY**

The chemical, mineralogical and physical changes that rocks undergo during geological burial and exhumation in different tectonic regimes. How metamorphic rocks are used to infer conditions and processes within the earth's interior. The geological evolution of western Canada as deduced from its metamorphic history. (*Prerequisites*: 202 and 240) (3-3)

**EOS 330 (1½) PALEOBIOLOGY**

Processes and patterns in the evolution of life through time; speciation, extinction, and evolution. The relationship of biotas to depositional systems: paleoecology, ecostratigraphy, biostratigraphy and paleobiogeography. Major events in the history of life. Laboratories and field trips will provide illustrative fossil examples, particularly of invertebrates, partly in collaboration with the Royal British Columbia Museum. (*Prerequisites*: 201, BIOL 150A; or permission of the instructor) (3-3)

**EOS 340 (1½) ATMOSPHERIC SCIENCES**

Introduction to the fundamental process and forces governing the Earth's weather and climate. Specific applications such as weather systems and global climate/change. Topics include clouds, precipitation, tornadoes, thunderstorms, cyclones, air-sea interaction, El Niño, Greenhouse Effect, ozone hole, and acid rain. The second half of the course will be devoted to specific applications such as weather systems and global climate/climate change. (*Prerequisites*: PHYS 112, MATH 100/101, or permission of instructor) (3-0)

**EOS 400 (1½) ADVANCED FIELD SCHOOL**

A two-week field trip through the Southern Canadian Cordillera, examining the rock units and structures of the major tectonic elements in southern British Columbia and Alberta. Parallels, where possible, recent COCORP and LITHOPROBE seismic survey routes. Introduces the complex evolutionary states of the western margin of North America. Normally held in late August - early September, prior to registration. (*Prerequisite*: 300)

**EOS 410 (formerly GEOL 410) (1½) GLOBAL TECTONICS**

A study of global tectonic systems including geological, geophysical, geochemical and geographical perspectives on major tectonic environments. A wide range of examples from different continents will be used. Vancouver Island will also be examined. (*Prerequisite*: 202, or permission) (3-1)

**EOS 420 (formerly 350; formerly GEOL 350) (1½) RESOURCE GEOLOGY**

A geological study of the major types of economically important metallic and nonmetallic minerals and fossil fuels, basic processes of ore formation, exploration and mining techniques. The impacts of these activities on the environment are also considered. (*Prerequisites*: 201, 310, 320) (3-2)

**EOS 430 (1½) ISOTOPES IN EARTH AND OCEAN SCIENCES**

Basic principles controlling isotope distributions, including natural abundances, radiogenic decay, equilibrium and kinetic isotope effects. Applications of these principles in the fields of: 1) Earth history — global processes and chronology; 2) mineralization — diagenesis, catagenesis; 3) hydrogeology and characterization of water and air masses; 4) biogeochemistry and biological fractionation isotopes. (*Prerequisite*: 240 or permission of instructor)

**EOS 431 (1½) PHYSICAL OCEANOGRAPHY**

Physical properties of sea water, equation of state, gravitational stability, large-scale ocean currents, meridional distribution of salinity and temperature, surface heat budgets, water masses, estuary flows. (*Pre- or corequisites*: MATH 326, 330B, PHYS 317, 321A, 325; or permission of instructor) F(3-0)

**EOS 432 (1½) DYNAMICAL OCEANOGRAPHY**

The circulation of the ocean in response to forcing by wind stress and buoyancy input on a variety of space and time scales is examined. Topics include western intensification (why there is a Gulf Stream), equatorial dynamics and circulation on the continental shelf. (*Pre- or corequisites*: 431, PHYS 426; or permission of instructor) S(3-0)

**EOS 433 (1½) THE OCEAN-ATMOSPHERE SYSTEM**

Studies of the earth's climate require an understanding of the intimate links between the ocean and atmosphere. Basic theories of the circulation of each are discussed and the physics of coupled models examined with emphasis on simple intuition-building mathematical models as well as discussion of large computer models. (*Pre- or corequisites*: 431, PHYS 426; or permission of instructor) F(3-0)

**EOS 434 (1½) OCEAN MIXING PROCESSES**

The distribution of properties in the ocean and ocean circulation are greatly influenced by small scale processes that cannot be explicitly included in numerical models of the ocean. The physics and parameterization of processes such as breaking internal waves, double diffusion and boundary mixing are analyzed, with discussion of observational techniques as well as theories. (*Pre or corequisites*: 431, PHYS 426; or permission of instructor) S(3-0)

**EOS 435 (1½) WAVES IN THE OCEAN**

The mathematical theories and physics of surface gravity waves, internal waves, Rossby waves and other wave motions in the ocean are introduced, with an emphasis on general results that describe the effects on the waves of variable properties of the medium, and the back effects of the waves on the mean flow. (*Pre- or corequisites*: 431, PHYS 426; or permission of instructor) S(3-0)

**EOS 440 (1½) HYDROGEOLOGY**

The nature, location and migration of fluids in the Earth's crust and surficial deposits. Theory of groundwater flow in fractured and porous media. Controls in groundwater flow systems. Surface-groundwater interactions and changes in water quality; hydrogeological aspects of waste disposal and resource development. Field and lab techniques. (*Prerequisites*: 240, 340, or permission of instructor) (3-3)

**EOS 450 (1½) QUATERNARY GEOLOGY**

The methods and theory of Quaternary research, stressing the processes of interaction between the geosphere and biosphere. Topics include dating methods, paleoenvironmental studies, glaciation and global change, geological hazards, interdisciplinary research and applied studies, particularly the influence for engineering design. (*Prerequisites*: 201, 240, 330, or permission of instructor) (3-0)

**EOS 460 (1½) EARTH SYSTEM SCIENCE**

An examination of the interrelationships between the complex systems operating in the solid earth, hydrosphere and atmosphere; methods of systems analysis for the planet; modeling of global processes, especially past and future climate change. (*Prerequisites*: completion of at least three 300-level EOS courses) (3-3)

**EOS 470 (1½) GEODYNAMICS**

An introduction to thermal and mechanical modelling of earth processes through analytical and numerical techniques. Applications of continuum physics to geodynamics, including dynamic modelling of mantle convection, plate tectonics, lithospheric deformation, and sedimentation. Incorporation of the effects of surface processes and subsurface fluid flows on crustal deformation. (*Prerequisite*: Fourth year standing in SEOS or Physics, or permission of instructor) (3-3)

**EOS 480 (1½) APPLIED GEOPHYSICS**

An introduction to geophysical methods used in resource exploration and in investigations of crustal structure. Topics include principles and applications of seismology, gravity, magnetics, heat flow, radioactivity and electrical methods. Emphasis will be placed on interpretation of geophysical data for earth structure. (*Prerequisite*: Fourth year standing in SEOS or Physics, or permission of instructor) (3-3)

**EOS 490 (formerly GEOL 490) (1½ or 3) DIRECTED STUDIES IN GEOLOGY**

With the consent of the School and the faculty member concerned, a student may be permitted to pursue a course of directed studies. No student is permitted to take more than three units of 490 studies.

**EOS 499 (3) HONOURS THESIS**

A research project conducted under the direction of faculty. This course is normally restricted to Earth and Ocean Honours students. (Grading: INP; letter grade)



## DEPARTMENT OF ECONOMICS

Malcolm Rutherford, B.A. (Heriot-Watt), M.A. (S. Fraser), Ph.D. (Durh.), Professor and Chair of the Department  
 Kenneth L. Avio, B.Sc. (Ore.), M.S., Ph.D. (Purdue), Professor  
 David E. A. Giles, B.Sc., M.Com., Ph.D. (Cant.), Professor  
 J. Colin H. Jones, B.A. (Wales), M.A. (Mon. St.), Ph.D. (Queen's), Professor  
 Carl A. Mosk, A.B. (Calif.-Berk.), M.S. (M.I.T.), Ph.D. (Harv.), Professor  
 John A. Schofield, B.A. (Durh.), M.B.A. (Indiana), M.A., Ph.D. (S. Fraser), Professor  
 William D. Walsh, B.Com. (Brit. Col.), M.A., Ph.D. (Yale), Professor  
 Gerald R. Walter, B.A., M.A., Ph.D. (Calif.), Professor  
 Robert V. Cherneff, B.A. (U. of Vic.), M.A., Ph.D. (Wash.), Associate Professor  
 Judith A. Giles, B.Ec., M.Ec. (Monash), Ph.D. (Cant.), Associate Professor  
 Ian P. King, B.A. (Conc.), M.A., Ph.D. (Queen's), Associate Professor  
 Joseph Schaafsma, B.A., M.A. (McM.), Ph.D. (Tor.), Associate Professor  
 Donald G. Ferguson, B.A., M.A., Ph.D. (Tor.), Assistant Professor  
 Peter W. Kennedy, B.Com. (N.S.W.), M.A., Ph.D. (Queen's), Assistant Professor  
 Serge Nadeau, B.A., M.B.A. (Laval), Ph.D. (Carnegie - Mellon), Assistant Professor  
 Nancy M. South, B.A. (Brit. Col.), M.A. (Essex), Ph.D. (Tor.), Assistant Professor  
 Kenneth G. Stewart, B.A. (Dal.), M.Sc. (Lond.), M.A., M.A., Ph.D. (Mich.), Assistant Professor  
 Linda A. Welling, B.A. (Mt. All.), M.A. (Queen's), Ph.D. (W. Ont.), Assistant Professor  
 Anming Zhang, B.Sc. (Shanghai Jiao Tong), M.Sc., Ph.D. (Brit.Col.), Assistant Professor  
 Laura J. Black, B.A. (McG.), M.A. (Wat.), Cooperative Education Coordinator  
 Gerald L. Bluck, B.Sc. (U. of Vic.), Senior Scientific Assistant  
 Priscilla W. Shiu, Administrative Officer

### Visiting, Adjunct and Cross-listed Appointments:

Clarence L. Barber, B.A. (Sask.), M.A. (Clark), Ph.D. (Minn.), Adjunct Professor (1994-96)  
 Robert L. Bish, A.B. (S. Calif.), A.M., Ph.D. (Indiana), Professor (Public Administration) (1994-96)  
 Kevin H. Burley, B.A., Ph.D. (Lond.), Adjunct Professor (1993-95)  
 James Cutt, M.A. (Edin.), M.A., Ph.D. (Tor.), Professor (Public Administration) (1994-96)  
 A. Rodney Dobell, B.A., M.A. (Brit. Col.), Ph.D. (M.I.T.), Professor (Public Administration) (1994-96)  
 Ralph W. Huenemann, B.A. (Oberlin), M.A., Ph.D. (Harv.), Professor of Economic Relations with China (Public Administration) (1994-96)  
 James J. McRae, B.A. (U. of Vic.), M.A., Ph.D. (W. Ont.), Professor (Public Administration) (1994-96)  
 Michèle Pujol, D.E.E.S. (Paris I, Pantheon-Sorbonne), Dip.H.E.C.J.F., M.A. (Wash.), Ph.D. (S. Fraser), Associate Professor (Women's Studies) (1993-95)  
 Robert D. Warne, B.A. (Stan.), M.A., Ph.D. (W. Ont.), Visiting Assistant Professor (1994-95)  
 Jie Zhang, B.A. (Sichuan), M.B.A. (Nankai), M.A., Ph.D. (W. Ont.), Visiting Assistant Professor (1994-95)  
 Richard J. Porges, B.A., M.A. (S. Fraser), Visiting Lecturer (1994-95)

### GRADUATE PROGRAM

For further information on studies leading to the M.A. Degree, see page 315.

### LIMITATION OF ENROLLMENT

Students are advised that because of limited staff and facilities, it may be necessary to limit enrollment in certain courses. Course enrollment limits will be listed during registration. Students will be admitted on a first come, first served basis.

## GENERAL, MAJOR AND HONOURS B.A. PROGRAMS

### Requirements:

#### General

- (a) 201 and 202
- (b) 9 units of Economics courses numbered 300 and above

#### Major

- (a) A grade point average of at least 3.00 in 201 and 202, and not less than a C in either course
- (b) CSC 105, Math 102 and 103, or 100 and 103, or 100 and 101, or permission of the Department (See Notes 2 and 6)
- (c) 245 and 246 with at least a C+ in 245 (See Note 3)
- (d) A total of 15 units of Economics courses numbered 300 and above, including:  
 300 or 302  
 301 or 303  
 321  
 345 or 365

#### Honours

- (a) A grade point average of at least 5.50 in 201 and 202, and not less than a B in either course
- (b) Computer Science and Mathematics requirement as for Major
- (c) 245 and 246 with at least a B in 245 and at least a B- in 246 (See Note 3)
- (d) 300 and 301 with a grade point average of at least 5.50 and not less than a B- in any one of these courses. Or 302, 303 with a grade point average of at least 5.50 and not less than a B- in any one of these courses; and:  
 One of 313 or 400  
 One of 314, 333, or 401
- (e) 321, 345 or 365 (formerly 445), and 499
- (f) In addition to the 12 upper level units specified in (d) and (e), 12 units of Economics courses numbered above 300
- (g) Three upper level units in another subject or subjects chosen with the approval of the Department
- (h) Three units of electives, any level

Suggested electives for all students in the B.A. in Economics program; CSC 200; 3 units of Mathematics in addition to 100 and 101 or 102 and 103; POLI 100.

## MAJOR AND HONOURS B.Sc. PROGRAMS

### Major

- (a) A grade point average of at least 3.00 in 201 and 202, and not less than a C in either course
- (b) MATH 102, 103 and 203. Or MATH 100, 103 and 203. Or MATH 100 and 101; and 233A; and 200 and 201. Or, permission of the Department. (See Note 2)
- (c) CSC 105 (See Note 6)
- (d) 245 and 246 with at least a C+ in 245 (See Note 3)
- (e) At least a C+ in 350
- (f) The following Economics courses numbered 300 and above  
 One of 300 or 302  
 One of 301 or 303  
 350, 351, 353, 445 or both 365 and 366  
 Either 440 or both 400 and 401  
 At least one of 450, 451, 452, 453, 465, 466, or 467

### Honours

- (a) A grade point average of at least 5.50 in 201 and 202, and not less than a B in either course
- (b) Mathematics requirements as for Major
- (c) CSC 105 (See Note 6)
- (d) 245 and 246 with at least a B in 245 and at least a B- in 246 (See Note 3)
- (e) At least a C+ in 350
- (f) One of 300 or 302, and one of 301 or 303 with a grade point average of at least 5.50 and not less than a B- in any one of these courses



- (g) A total of at least 25.5 units of Economics courses numbered 300 and above, including the units in (f) and:  
350, 351, 353, 445 or both 365 and 366, 499  
Either 440 or both 400 and 401  
At least two of 450, 451, 452, 453, 465, 466, or 467
- (h) Three upper level units in another subject or subjects chosen with the approval of the Department
- (i) One and a half units of electives, any level

Suggested electives for students in the B.Sc. in Economics program are: MATH 233A and 242, CSC 110 and 115, PHIL 220.

## ECONOMICS UNDERGRADUATE COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Science is described on page 43. Additional general regulations pertaining to Cooperative Education Programs at the University of Victoria are found on page 38.

The Economics Cooperative Education option provides students with an opportunity to combine their academic studies with four four-month periods of paid employment in Economics-related positions in the public or private sector.

Entry to the Economics Cooperative Education Program is restricted to full-time students (students taking twelve or more units of courses in the Winter Session) who are enrolled in an Honours or Major program offered by the Department. In order to be considered for admission to the Economics Cooperative Program, students require a G.P.A. of 5.0 or better in ECON 201, ECON 202, and ECON 245, with not less than B- in any one of these courses, and a G.P.A. of 4.5 overall; a grade of not less than B- (4.0) is required in CSC 105. In addition to grades, admission will also be based on a student's interests and abilities and a formal interview.

Students interested in the cooperative education option should normally apply in the Fall term of their second year of undergraduate study. The student's first work term will normally occur in the Summer term following their second academic year of study. Students planning to select the cooperative education option should plan to complete ECON 201, ECON 202, and ECON 245 no later than the Fall term of year two.

In order to remain in the Economics Cooperative Education Program a student must maintain a minimum G.P.A. of 4.5 both overall, and in Economics courses. To graduate with a cooperative education designation students must satisfactorily complete four work terms, and maintain the required grade point average.

Each work term is recorded on the official transcript of the student's academic record (as COM, N, or F).

Work term credit by challenge, as outlined on page 38 of this Calendar, is permitted in the Economics Cooperative Education Program.

Further information pertaining to the Economics Cooperative Education Program may be obtained from the Department.

## NOTES

- No more than six (6) units of Economics courses numbered 300 and above which are taken prior to the attainment of the G.P.A. in 201/202 required for a Major or Honours program may be counted for the respective program.
- Mathematics:
  - Mathematics requirements for Major and Honours programs should normally be completed by the end of the Second Year.
  - In order to satisfy the prerequisites of required courses in the B.Sc. program, if MATH 203 is taken, it must be completed in the Second Year.
- Statistics:
  - 245 and 246 should normally be completed by the end of the Second Year and must be completed by the end of the Third Year.
  - STAT 250 or STAT 260 may be substituted for 245, provided the grade requirements specified for 245 are also satisfied in STAT 250 or STAT 260.
  - STAT 251 or STAT 261 may be substituted for 246, provided the grade requirements specified for 246 are also satisfied in STAT 251 or STAT 261.
- In the Honours B.Sc. program, a maximum of 6 units of upper level courses in Mathematics, Computer Science or Statistics may be substituted for upper level Economics courses with permission of the Department.

- Students wishing to proceed to graduate studies in Economics are advised to include 350, 351, 365 and 366 (formerly 445), 400, 401, 445 and MATH 203 in their undergraduate program.
- CSC 105 is only open to students in Economics and Business. To qualify as a student in Economics you must be registered in, or have completed, ECON 201 and 202.
- Honours B.A. students wishing to participate in the Economics Cooperative Education Program are advised to complete MATH 203 by the end of the Second Year.

## ADDITIONAL INFORMATION

- Admission to an Honours program, which should be sought at the end of the Second Year, requires permission of the Department. Interested students should consult the Honours Adviser or the Department as early as possible in the first two years. Honours students will be required to maintain at least a second class average in courses taken within the Department in the Third and Fourth Years. ECON 499 is required for all Fourth Year Honours students. Third Year Honours students may be required to attend the seminar.
- To obtain a First Class Honours degree the requirements will be: a graduating average of at least 6.50; a grade point average of at least 6.50 computed on the basis of all upper level courses taken within the Department, except 499; and at least a second class grade in 499.
- To obtain a Second Class Honours degree, the requirements will be: a graduating average of at least 3.50; a grade point average of at least 3.50 computed on the basis of all upper level courses taken within the Department, except 499; and at least a C in 499.
- A student who fails to meet Departmental requirements for a first class standing in an Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet Departmental requirements for second class standing in an Honours program but has a second class graduating average will be granted a Second Class Major degree.
- Double Major: Students seeking a double major with another discipline in which a B.Sc. designation is offered may receive a B.Sc. only if the Economics B.Sc. requirements have been satisfied.

## UNDERGRADUATE COURSES

### ECONOMICS INTRODUCTORY AND INDIVIDUAL COURSES

Students who wish to take only one course in Economics should consider 100. Upper level courses may also be taken subject to the following regulations governing the prerequisite courses.

201 and 202 are prerequisites for all Third Year courses, unless otherwise stated below. In special cases, 201 and 202 may be taken concurrently with Economics courses numbered 305 and above with the permission of the Department. One of 300 or 302 and one of 301 or 303 are prerequisites for all courses numbered 400 and above unless permission is granted by the Department or unless otherwise stated below.

Students should consult the Department concerning courses offered in a particular year.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### ECON 100 (1½, formerly 3) THE CANADIAN ECONOMY — PROBLEMS AND POLICIES

A discussion of some of the important issues in economic decision making in both private and public sectors of the Canadian economy with an introduction to the basic concepts of economic analysis. (NOTE: Students wishing to proceed into the Commerce program at the University of British Columbia are advised to take 201 and 202 in their first year.) (Prerequisite: None; credit cannot be obtained by those who have previous credit in Economics; 100 and 201/202 cannot be taken concurrently.) F(3-0)

### ECON 201 (1½) PRINCIPLES OF MICROECONOMICS

The principles of microeconomic analysis with special reference to the theory of demand, the theory of the firm and the theory of distribution. (Mathematics 12 or MATH 120 is recommended; 100 and 201 cannot be taken concurrently. Not open to students with credit in 280)FS(3-1)



**ECON 202 (1½) PRINCIPLES OF MACROECONOMICS**

The principles of macroeconomic analysis with special reference to fluctuations in income and prices, monetary and fiscal policies for economic stabilization. (Mathematics 12 or MATH 120 is recommended; 100 and 202 cannot be taken concurrently.) FS(3-1)

**ECON 245 (formerly 240) (1½) DESCRIPTIVE STATISTICS AND PROBABILITY**

Populations, samples, measures of central location and dispersion. Deterministic time series analysis: trends, moving averages, seasonal adjustment, index numbers. Probability laws. Discrete and continuous random variables. Joint, marginal, and conditional distributions. Mathematical expectation and variance. Functions of random variables; laws of expectation. Covariance and correlation. Binomial, Poisson, and normal distributions. (Prerequisite: 100, or corequisite: 201 or 202. Prerequisites: MATH 100 or 102; CSC 105; or permission of the Department) (See Credit Limit, page 18) FS(3-1)

**ECON 246 (formerly 340) (1½) STATISTICAL INFERENCE**

Estimation, confidence intervals and hypotheses tests. Simple regression and correlation. Multiple regression; t and F tests. (Not open to students who have credit for STAT 251 or STAT 261) (Prerequisites: 245 or STAT 250 or STAT 260; MATH 100 or 102; CSC 105; or permission of the Department) (See Credit Limit, page 18) FS(3-1)

**ECON 302 (1½) INTERMEDIATE MICROECONOMIC THEORY**

An examination of the theories of consumer demand; production and cost; the firm and market under conditions of perfect competition, monopoly, monopolistic competition and oligopoly; factor markets and distribution; and welfare economics. (Pre- or corequisite: MATH 100 or 102) (Not open to students with credit in 300 or 304A) FSK(3-0)

**ECON 303 (1½) INTERMEDIATE MACROECONOMIC THEORY**

Theories of aggregate economic behaviour; the determination of national income and employment, consumption, investment, inflation, growth and fluctuations, economic policy. (Pre- or corequisite: MATH 100 or 102) (Not open to students with credit in 301 or 304B) FSK(3-0)

**ECON 305 (1½) INTRODUCTION TO MONEY AND BANKING**

The principles of money, credit creation and banking; organization, operation and control of the banking system; and the relationship between the quantity of money and the level of economic activity. FS(3-0)

**ECON 306 (1½) INTERNATIONAL ECONOMICS**

An introduction to international trade and finance. Topics include determinants of trade, balance of payments, and policy issues of current interest. The latter may include the political economy of tariffs, bilateral and multilateral trade negotiations, trade and development. (Not open to students currently registered in 405A, or with credit in 405A) FS(3-0)

**ECON 307 (formerly 402) (1½) HISTORY OF ECONOMIC THOUGHT**

A survey of the ideas of major thinkers in Economics from the Mercantilist and Physiocratic Schools, through Adam Smith and Classical Economics, to the development of Neoclassicism and the Macroeconomics of J.M. Keynes. (Not open to students with credit in 407) S(3-0)

**ECON 308 (1½) INTRODUCTION TO THE ECONOMIC ANALYSIS OF LAW**

An overview of economic principles and methodologies applied to a variety of legal doctrines. Property rights, nuisance, contract, accidents, product liability and crime are discussed. Applications of the Coase Theorem and principles of insurance are emphasized. (Not open to students with credit in 408, 408A or 408B) F(3-0)

**ECON 310 (3) INDUSTRIAL ORGANIZATION AND PUBLIC POLICY**

Problems of competition and monopoly; relevant public policy, with special reference to Canada. Y(3-0)

**ECON 312 (1½) URBAN LAND ECONOMICS**

Application of economic principles to the form and structure of urban areas; land use, external effects and public policy in the urban context. Topics include: intraurban location, economic function and specialization within the city, the economics of urban transport, housing and public services. (Not open to students with credit in 412) NO(3-0)

**ECON 313 (1½) (formerly half of 300) TOPICS IN MICROECONOMICS**

Selected topics may include intertemporal choice, the organization of the firm, imperfect competition in product markets, discrimination in labour markets, basic game theory, "lemons" models, and additional topics in distribution and welfare economics not included in 302. (Prerequisite: 302) (Not open to students with credit in 300) F(3-0)

**ECON 314 (1½) (formerly half of 301) TOPICS IN MACROECONOMICS**

Selected topics may include the theory of stabilization policy, government deficits and debt, wage and price adjustment, growth and cycles, theories of consumption, investment, money demand and money supply, and international macroeconomics. (Prerequisite: 303) (Not open to students with credit in 301) S(3-0)

**ECON 315 (3) LABOUR ECONOMICS AND INSTITUTIONS**

The economic analysis of labour markets; labour demand and supply; human capital theory; wage and employment determination; the economics of discrimination; government intervention in the labour market; selected macroeconomic aspects of labour markets. Topics in labour market institutions selected from: the theory of labour movements; the structure of organized labour in Canada; the economics of trade unions; collective bargaining models; industrial disputes; dispute settlement procedures. Y(3-0)

**ECON 317 (1½) THE ECONOMICS OF CANADIAN HEALTH CARE**

An analysis of resource allocation in the Canadian health care sector. Topics include the special characteristics of health care goods and services, market failures in the health care sector, economic modelling of the consumption and production of health care, and a discussion of current issues in the economics of health care. (Prerequisite: 201) S(3-0)

**ECON 320 (1½) ECONOMIC DEVELOPMENT**

An examination of the economics of development with reference to Third World countries. Main emphasis will be on problems and policies, both domestic and international. Topics will include the relevance of the historical growth experience; poverty and income distribution; agriculture, technology, industrialization, and education; population and migration; international trade and foreign investment. (Not open to students with credit in 420) NO(3-0)

**ECON 321 (1½) THE ECONOMIC HISTORY OF CANADA**

The story of long-run economic growth and welfare in the Canadian economy, with the aid of economic analysis, quantitative data and other historical materials. Emphasis on the development of the Canadian economy from a resource based economy to a developed industrial economy within an international setting. FS(3-0)

**ECON 323A (1½) COMPARATIVE ECONOMIC SYSTEMS**

A study of modern economic systems with reference to Capitalist, Socialist, and Third World economies; emphasis will be given to the organization, operation, and performance of economic systems. (Not open to students with credit in 323) NO(3-0)

**ECON 323B (1½) THE SOCIALIST ECONOMIES**

A study of the history, institutions, principles of operation, performance and prospects of the current and former socialist economies of Europe. (Not open to students with credit in 323) NO(3-0)

**ECON 324 (1½) ECONOMIC DEVELOPMENT IN SOUTHEAST ASIA**

Economic performance and economic institutions of countries in Southeast Asia with special reference to Indonesia, Malaysia, the Philippines, and Thailand; focuses on rural development, urban growth, international economic relations, economic growth and equity. (Prerequisite: 100, or 201) (Not open to students with credit in PACI 324) NO(3-0)



**ECON 325 (1½) PUBLIC FINANCE**

A discussion of taxation and expenditure policies with an emphasis on Canada. Microeconomic effects of these policies will be examined in detail. F(3-0)

**ECON 326 (1½) FISCAL POLICY AND RELATED ISSUES**

A discussion of the principles of fiscal policy in the context of macroeconomic theory. This course will also examine the recent historical record of Canadian fiscal policy and focus on policy options for the present and future. NO(3-0)

**ECON 328 (1½) THE ECONOMIC DEVELOPMENT OF JAPAN, KOREA AND TAIWAN**

Economic development of Northeast Asia covering the period 1600 to 1970 with particular emphasis on the period 1600-1940 for Japan; and the periods 1900-1970 for Korea and Taiwan. Topics include dualism, population growth and development, capital accumulation, the importing of foreign technology, government planning and trade. Emphasis on the "Northeast Asian" model of economic development common to the three countries. (Prerequisite: 100 or 201; or PACI 200; or permission of the Economics Department) (Not open to students with credit in 322) F(3-0)

**ECON 330 (ES 312) (1½) ENVIRONMENTAL ECONOMICS**

Economic principles as applied to environmental questions associated with B.C. resource exploitation. The problem of spillovers to economic processes. Externalities and their management through economic institutions. Economic aspects of the use and conservation of the environment, particularly regarding energy, forestry, fisheries, mining, air and water. Problem of sustainable production, conservation, and possible limits to economic growth arising from scarcity of environmental resources. (Prerequisite: 201 or permission of the Department) (Not open to students with credit in 430 or 430B) FS(3-0)

**ECON 333 (1½) INTRODUCTION TO DYNAMIC MACROECONOMICS**

Macroeconomic theory from the perspective of market-clearing models. Topics will include the neoclassical theory of economic growth, saving and consumption, taxation and the public debt, and money and the price level. (Prerequisite: 303) NO(3-0)

**ECON 345 (1½) APPLIED ECONOMETRICS**

An intuitive development of the basic concepts and techniques in econometrics. The emphasis is on the application of econometric concepts and techniques in analyzing economic phenomena. (Prerequisite: 246 or equivalent) (Cannot be taken concurrently with 365 or 366) (Not open to students with credit for 365 or 445) FS(3-1)

**ECON 350 (1½) AN INTRODUCTION TO MATHEMATICAL ECONOMICS: PART ONE**

An introduction to the application of calculus and linear algebra to selected problems in microeconomic and macroeconomic theory. (Prerequisites: MATH 102 and 103 or permission of the Department. Pre- or corequisites: 300 or 302, and 301 or 303) F(3-1)

**ECON 351 (1½) AN INTRODUCTION TO MATHEMATICAL ECONOMICS: PART TWO**

An introduction to the use of difference equations, differential equations and dynamic optimization in economic models. (Prerequisites: MATH 102, 103 and 203 or permission of the Department. Pre- or corequisites: 300 or 302, and 301 or 303) S(3-0)

**ECON 353 (1½) COMPUTER AIDED MODELLING IN ECONOMICS**

The development of a working knowledge of computers as utilized in economic modelling. Numerical implementation of a variety of economic models and their use in the simulation of economic events and policies. Topics include input-output models, models of consumer welfare, production models, computational general equilibrium models. The principal software package will be MATLAB. (Prerequisites: 246 or equivalent, MATH 103 or MATH 240, CSC 105 or CSC 110; 350 recommended) S(2-2)

**ECON 365 (1½) (formerly half of 445) ECONOMETRICS: PART I**

Principles of econometrics with applied examples. Topics include: estimation of the regression model; sampling properties of estimators; testing restrictions; restricted least squares; generalized least squares; aspects of specification analysis. (Prerequisites: 246 or equivalent; MATH 102 and 103, or MATH 240, or MATH 100, 101 and 233A) (Not open to students with credit in 445) F(3-0)

**ECON 366 (1½) (formerly half of 445) ECONOMETRICS: PART II**

Principles of econometrics with applied examples. Topics include: further aspects of specification analysis; data issues (multicollinearity, cointegration, missing observations); other special models (dynamic models, seemingly unrelated regressions, simultaneous equations models). (Prerequisite: 365) (Not open to students with credit in 445) S(3-0)

**ECON 400 (1½) ADVANCED MICROECONOMIC THEORY**

Selected topics in microeconomic theory. (Prerequisites: 300 or 302, and 350) (Not open to students with credit in 440) F(3-0)

**ECON 401 (1½) ADVANCED MACROECONOMIC THEORY**

Selected topics in macroeconomic theory. (Prerequisites: 301 or 303, and both 350 and 351) F(3-0)

**ECON 405A (1½) INTERNATIONAL TRADE THEORY**

The study of international trade theory and policy with emphasis on general equilibrium analysis. Topics include the factor proportions theory of trade, technological determinants of trade, the theory of tariffs and trade policy, models of strategic interaction between countries. (Not open to students with credit in 405) F(3-0)

**ECON 405B (1½) INTERNATIONAL MONETARY THEORY AND POLICY**

A study of international monetary economics, including such topics as foreign exchange markets, Keynesian and monetarist mechanisms of adjustment, forward exchange markets, alternate exchange rate systems, capital mobility and open economy macro policies. (Not open to students with credit in 405) S(3-0)

**ECON 406 (1½) MONETARY THEORY AND POLICY**

Monetary economics studied in the context of overlapping generations models. Barter and commodity money; fiat money and inflation; international monetary systems. Financial intermediation, banking, and the money supply. Deficits and the national debt; saving and investment. (Prerequisite: 301 or 303; 305 recommended) S(3-0)

**ECON 407 (1½) TOPICS IN THE HISTORY OF ECONOMIC THOUGHT**

Seminar in selected issues in the History of Economic Thought. Topics will include a detailed examination of Adam Smith's *Wealth of Nations* and Alfred Marshall's *Principles of Economics*. Other topics may vary from year to year. NO(3-0)

**ECON 408A (formerly half of 408) (1½) ECONOMIC ANALYSIS OF PROPERTY AND TORT**

A seminar course investigating economic aspects of law and legal institutions as applied to property and tort. Other topics may be explored as time permits. (Prerequisite: 300 or 302; corequisite: 246 or equivalent) S(3-0)

**ECON 408B (formerly half of 408) (1½) ECONOMIC ANALYSIS OF CRIME AND CONTRACT**

A seminar course investigating economic aspects of law and legal institutions as applied to crime and contract. Other topics may be explored as time permits. (Prerequisite: 300 or 302; corequisite: 246 or equivalent) NO(3-0)

**ECON 410A (1½) PROBLEMS OF CANADIAN MICROECONOMIC POLICY**

Selected topics involving the application of microeconomic analysis to Canadian problems and policies; topics vary but generally include education, health care, regulation and competition policy. (Prerequisite: 300 or 302. Not open to students with credit in 410) F(3-0)



**ECON 410B (1½) PROBLEMS OF CANADIAN MACROECONOMIC POLICY**

Selected topics involving the application of macroeconomic analysis to Canadian problems and policies in the areas of unemployment, inflation and economic growth. (*Prerequisite*: 301 or 303. Not open to students with credit in 410) F(3-0)

**ECON 414 (1½) REGIONAL ECONOMICS**

Consideration of the problem of regional economic disparities. Theories of migration, location and regional economic growth. Techniques for analyzing aspects of the regional problem, including cost benefit analysis, regional accounting, shift share analysis, multiplier analysis. Policy issues relating to the problem. NO(3-0)

**ECON 416 (1½) COST BENEFIT ANALYSIS: PRINCIPLES AND APPLICATION**

Principles of cost benefit analysis including consideration of welfare economics, the treatment of intangibles, nonefficiency considerations, time discounting, evaluation criteria, uncertainty and risk; selected applications in such areas as human resource economics, natural resource and recreation economics, economic development and urban planning. (*Prerequisite*: 300 or 302) S(3-0)

**ECON 420 (1½) THEORY OF ECONOMIC DEVELOPMENT**

Theories of economic development; domestic policies for development; investment criteria; planning and financing economic development; the role of foreign trade and aid in economic development. (320 recommended) NO(3-0)

**ECON 421 (1½) EUROPEAN AND INTERNATIONAL ECONOMIC HISTORY**

The rise of capitalism and the Industrial Revolution especially in Western Europe. The British experience and comparative rates of growth in European countries, with some attention to the transference of industrialization techniques to non-European countries. NO(3-0)

**ECON 427 (1½) PUBLIC CHOICE THEORY**

The use of concepts from economic theory to analyze the structure and performance of the public sector. Topics include the nature of public and packageable goods, demand articulation, political organization, bureaucratic supply and public service industry structure. (*Prerequisite*: 300 or 302, or permission of the Department) NO(3-0)

**ECON 428 (1½) THE POSTWAR JAPANESE ECONOMY**

Covers the period 1945-present with special emphasis on the period after 1970. Topics include: trade, the exchange rate, reforms in the banking sector, population and labor force, education and the labor market, unions and collective bargaining, analytical models of the Japanese firm, government-business relations and government planning, the internationalization of the Japanese economy and Japan's position in the Pacific economic trading zone, and the importing and exporting of technology. (*Prerequisite*: 328, or permission of the Economics Department) S(3-0)

**ECON 429 (1½) POPULATION ECONOMICS**

This course commences with a discussion of basic demographic methods and then takes up topics in population analysis of interest to economists. Topics to be covered include: Malthusian theory; the economic consequences of population growth; the economics of fertility, mortality and migration; aging and intergenerational transfers. Applications to development, labour, public finance, and other fields of economics may be included. (*Prerequisite*: 301 or 303) S(3-0)

**ECON 430A (1½) NATURAL RESOURCE ECONOMICS**

An examination of the economic principles governing the use of natural resources, social and private cost and the regulation of natural resource use. The economics of various resource sectors, including fisheries, forests, recreation and mining. (*Prerequisite*: 300 or 302, or permission of the Department) F(3-0)

**ECON 430B (1½) TOPICS IN NATURAL RESOURCE ECONOMICS**

Seminar on selected issues in natural resource economics; rents and their appropriation, taxation, user's cost, ecology and economics, depletion of energy and other reserves, sustainable economic development and resource exploitation, and applications of cost benefit analysis are indicative topics. (*Prerequisite*: 330 or 430A, or permission of the Department) NO(3-0)

**ECON 435 (1½) FINANCIAL ECONOMICS**

An introduction to the application of economics to finance, with an emphasis on the theory of asset pricing. Topics include mean-variance portfolio analysis; the capital asset pricing model and arbitrage pricing theory; equity and fixed income securities; options and the Black-Scholes pricing formula; and futures contracts. (*Prerequisites*: 300 or 302, and 246 or equivalent) F(3-0)

**ECON 450 (1½) GAME THEORY IN ECONOMICS**

Game theory, including dynamic games. Applications to the study of the strategic interaction between economic agents. Topics include standard oligopoly models, entry deterrence and predation, R and D rivalry. (*Prerequisite*: 350) S(3-0)

**ECON 451 (1½) GENERAL EQUILIBRIUM AND WELFARE ECONOMICS**

Selected topics in general equilibrium theory and welfare economics. (*Prerequisite*: 400) NO(3-0)

**ECON 452 (1½) INFORMATION AND INCENTIVES**

Theory and applications of the principal agent model to moral hazard, adverse selection and signalling problems. (*Prerequisite*: 350) S(3-0)

**ECON 453 (1½) BUSINESS CYCLES AND ECONOMIC GROWTH**

Real and monetary models of the business cycle, models of growth and technological change. (*Prerequisites*: 350 and 351) S(3-0)

**ECON 465 (1½) ADVANCED ECONOMETRICS**

A rigorous discussion of key econometric techniques. Topics include: estimation principles; testing strategies; specification analysis and pre-testing consequences; systems estimation; Bayesian inference; non-linear models. (*Prerequisites*: 365 and 366, or 445) NO(3-0)

**ECON 466 (1½) MACROECONOMETRICS**

Theoretical and applied econometric issues of special interest to macroeconomists. Topics include: modelling with non-stationary time series, cointegration, causality, ECM models. Other possible topics include: use of large-scale econometric models; rational expectations models. (*Prerequisites*: 365 and 366, or 445) NO(3-0)

**ECON 467 (1½) MICROECONOMETRICS**

Theoretical and applied econometric issues of interest to microeconomists. Topics may include: modelling with financial data (asset pricing models, GARCH models); testing for market efficiency; modelling with limited and qualitative dependent variables; estimation of demand and cost models. (*Prerequisites*: 365 and 366, or 445) NO(3-0)

**ECON 495 (1½ or 3) DIRECTED STUDIES**

Directed reading and/or research for Major and Honours students with first class standing in Economics under the supervision of a faculty member willing to supervise such a course. Students may take this course for a total of up to three units. (*Prerequisite*: Permission of the Department)

**ECON 496 (1½) ISSUES IN ECONOMIC ANALYSIS**

An examination of issues in economic analysis. The topic(s) will vary from year to year. Consult the Department for a list of topics. F(3-0)

**ECON 499 (formerly 470) (3) HONOURS THESIS AND SEMINAR**

Seminar for fourth year Honours students only. Includes oral presentations related to the student's proposed thesis research. Y



## DEPARTMENT OF ENGLISH

Evelyn M. Copley, B.A. (B.Y.U.), M.A., Ph.D. (Brit. Col.), Associate Professor, Director of Literature Program, and Chair of the Department

Edward I. Berry, A.B. (Wesleyan), M.A., Ph.D. (Calif., Berk.), Professor

Michael R. Best, B.A., Ph.D. (Adel.), Professor

Anthony S.G. Edwards, B.A. (R'dg), M.A. (McM.), Ph.D. (London), Professor

Anthony B. England, B.A., M.A. (Manc.), Ph.D. (Yale), Professor

Bryan N.S. Gooch, B.A., M.A. (Brit. Col.), Ph.D. (Lond.), A.R.C.T. (Tor.), L.T.C.L., F.T.C.L. (Lond.), Professor

Patrick J. Grant, B.A. (Queen's, Belf.), D.Phil. (Suss.), Professor

Sneja Gunew, B.A. (Melb.), M.A. (Tor.), Ph.D. (N'cle., N.S.W.), Professor

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Victor A. Neufeldt, B.A. (Brit. Col.), Ph.D. (Ill.), Professor

Colin J. Partridge, B.A. (Nott.), Cert.Ed. (Lond.), Ph.D. (Nott.), Professor

Stephen A. C. Scobie, M.A. (St. And.), Ph.D. (Brit. Col.), Professor

Terry G. Sherwood, B.A. (Ore.), M.A., Ph.D. (Calif., Berk.), Professor

Herbert F. Smith, A.B., A.M. (Bost.), Ph.D. (Rutgers), Professor

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G. Kim Blank, B.A. (S. Fraser), M.A. (Wales), Ph.D. (Southampton), Associate Professor

Thomas R. Cleary, B.A. (Queens Coll.), M.A., Ph.D. (Prin.), Associate Professor

Misao Anne Dean, B.A., M.A. (Car.), Ph.D. (Queen's), Associate Professor

Diane Edwards, B.A. (Roch.), M.A., Ph.D. (Prin.), Associate Professor and Director of Honours Program

Toby A. Foshay, B.A., M.A. (Acadia), Ph.D. (Dal.), Associate Professor

Smaro Kamboureli, B.A. (Aristotelian), M.A., Ph.D. (Man.), Associate Professor

Arnold Keller, B.A. (George Williams), M.A. (Claremont), M.A., Ph.D. (Con.), Associate Professor and Director, Writing Program

Kathryn Kerby-Fulton, B.A., B.Ed. (York, Can.), D.Phil. (York, U.K.), Associate Professor

Patricia J. Koster, B.A. (Brit. Col.), M.A. (Calif., Berk.), Ph.D. (Lond.), Associate Professor

Margot K. Louis, B.A. (Smith Coll.), B.A. (Oxon.), Ph.D. (Tor.), Associate Professor

Judith I. Mitchell, B.A., M.A., (Sask.), Ph.D. (Alta.), Associate Professor

Robert M. Schuler, B.A. (Bellarmine), M.A., Ph.D. (Colo.), Associate Professor

Nelson C. Smith, B.A. (Prin.), M.A.T. (Oberlin), Ph.D. (Wash.), Associate Professor

John J. Tucker, B.A., M.A. (Tor.), B.Lit. (Oxon.), Ph.D. (Tor.), Associate Professor

Bruce E. Wallis, B.A. (Rutgers), M.A. (Harv.), Ph.D. (Prin.), Associate Professor

Trevor L. Williams, B.A., M.A. (Manc.), Ph.D. (Wales), Associate Professor

Edward R. Zietlow, B.A. (Dakota Wesleyan), M.A. (Bost.), Ph.D. (Wash.), Associate Professor

Luke Carson, B.A. (McG.), M.A.Phil. (Calif., L.A.), Assistant Professor

James A. Dopp, B.A. (W. Laurier), M.A. (U. of Vic.), Ph.D. (York), Assistant Professor

Gordon D. Fulton, B.A. (Tor.), M.A., Ph.D. (Lond.), Assistant Professor

Sheila M. Rabillard, B.A. (Queen's), B.Ed. (W. Ont.), M.A. (Queen's), Ph.D. (Prin.), Assistant Professor

Lisa A. Surridge, B.A. (Queen's), M.A., Ph.D. (Tor.), Assistant Professor

Gerald V. Baillargeon, B.A., M.A. (Windsor), Ph.D. (Brit. Col.), Senior Instructor

J. Douglas Beardsley, B.A. (U. of Vic.), M.A. (York), Senior Instructor

Claire McKenzie, B.A., M.A. (U. of Vic.), Senior Instructor

K. Dawn Neill, B.A. (Trent), M.A. (U. of Vic.), Senior Instructor

Audrey J. Neufeldt, B.A. (Brit. Col.), M.A. (Wash.), Senior Instructor

Judith A. Terry, B.A. (Leic.), M.Phil. (Lond.), Senior Instructor

Hedy Miller, B.A., M.A., M.L.S. (Brit. Col.), Administrative Officer

### Visiting, Adjunct and Cross-listed Appointments:

William Benzie, M.A., M.Ed., Ph.D. (Aberd.), Adjunct Professor (1993-95)

Charles Doyle, B.A., M.A. (N.Z.), Ph.D. (Auck.), Adjunct Professor (1993-95)

Joel H. Kaplan, B.A. (Penn.), M.A., Ph.D. (Tor.), Visiting Professor (1994-95)

Lorraine McMullen, B.A., M.A., Ph.D. (Ott.), Adjunct Professor (1993-95)

Beryl Rowland, Ph.D. (Brit. Col.), D.Litt. (Mt. St. Vin.), Adjunct Professor (1993-95)

Reginald C. Terry, B.A. (Leic.), M.A. (Brist.), Ph.D. (Lond.), Adjunct Professor (1993-95)

Michael J. Cullen, B.A. (Notre Dame, Nelson), M.A. (W. Ont.), Visiting Lecturer (1994-95)

Mark A. Jarman, B.A. (U. of Vic.), M.F.A. (Iowa), Visiting Lecturer (1994-95)

William E. Markham, B.A. (Stirling), M.A. (McM.), Visiting Lecturer (1993-95)

Cecilia Mavrow, B.A., M.F.A. (Brit. Col.), Visiting Lecturer (1994-95)

## GRADUATE PROGRAMS

For information on studies leading to the M.A. and Ph.D. degrees, see page 329.

## GENERAL, MAJOR AND HONOURS PROGRAMS

### Prerequisites

Students are referred to the University's regulations concerning the English Requirement on page 12, and to the remarks about First Year English on the same page. (Also see Registration, page 15.)

The prerequisite for all English courses numbered 200 and above is 3 units of first year English. This prerequisite is normally satisfied by one of the following sequences: 115/116, 121/122, or 150, 151; or by three units of appropriate transfer credit in English. However, with permission of the Department, some students may take 200 level courses in their first year. Second year students may take courses numbered 300 and above, but will be required to meet the normal standards of senior courses. 200 is not open to students with credit in 150/151.

Every student is required to own a good dictionary, e.g., *The Concise Oxford Dictionary*, *The American College Dictionary*, *Webster's Collegiate Dictionary*, *Dictionary of Canadian English*, *The Senior Dictionary*, *The Random House Dictionary of the English Language* (College Edition).

### General

Students wishing to take English as one of the fields of concentration in their General program should take in their First Year: 3 units from 115, 116, 121, 122, 150, 151; Second Year: 200, 201, 202, or 203; Third and Fourth Years: a total of 9 units in English courses numbered 300 and above. Students desiring advice about their choice of courses are invited to see the Department secretaries, who will arrange consultation with Departmental advisers. NOTE: 150/151 can be taken in either First Year or Second Year. However, students with credit in 150/151 cannot take 200, but can fulfill the Second Year requirement with 201, 202 or 203.

### Arts Co-op Option

Students completing first year and choosing English as a major may be interested in exploring the Arts Co-op option. Please see page 49\* for details regarding program requirements and options.

\* for Fine Arts Department, page 227.



## Major

Majors are required to take a total of 15 units in English at the senior level, of which 10½ units are to be chosen from the following Course Structure, and an additional 4½ units from courses numbered 300 and above. Normally at least 12 of these 15 units should be completed at the University of Victoria.

Course Structure for English Major:

- (a) At least one course (3 units) from: 150/151, 200, 201, 202, 203. Students planning to major in English are strongly recommended to take either 150/151 or 200. 200 is not open to students with credit in 150/151; such students may take 201, 202, 203 or, with the permission of the Department, substitute for 200 3 units of upper-level English courses.
- (b) At least 3 units from 351, 352, 366, 369.
- (c) At least 1½ units in addition to (b) requirements, from courses in literature before 1700: 340, 341, 346, 347, 351, 352, 353, 354, 357, 359, 360, 361, 362, 363, 364, 366, 369, 410, 473.
- (d) At least 1½ units from courses in literature covering the period 1700-1800: 372, 373, 374, 375, 376.
- (e) At least 1½ units from literature 1800-1900: 379, 380, 381, 382, 383, 384, 385, 386, 387, 427, 428, 474.
- (f) At least 1½ units from 20th century American, British or Commonwealth literature: 388, 429, 431, 432, 433, 434, 435 (formerly 465), 436, 437, 439, 449. (This requirement will be waived if the student has completed 201 or 203.)
- (g) At least 1½ units from Canadian literature: 448, 450, 451, 452, 453, 457, 458, 459. (This requirement will be waived if the student has completed 202.) In exceptional circumstances (for example, taking a double major), a student may obtain special permission from the Department to plan his/her program in consultation with the Director.

NOTE: Students who have credit for courses in English not now included in the Calendar should see the Director of Literature for advice in following the course structure.

The Department strongly recommends that students majoring in English have a reading knowledge of a second language and/or that they take courses in literature in translation of another culture.

## Honours

The Honours Program allows students of proven ability to study English language and literature more intensively than is possible in the Major or General Programs. While enjoying a comprehensive course structure, Honours students also participate in special seminars and receive the guidance of individual faculty members in connection with English 490/491 and 499. Students who take a special interest in English language or literature, or who are contemplating graduate work in English, are strongly advised to enroll in Honours rather than in the General or Major Program.

Normally Honours students will follow this pattern:

*First Year:* 121/122, or 150/151 (200 may be substituted for 150/151 in the first year with permission of the Department).

*Second Year:* 200, 310, plus some electives (e.g. Classics, History, Philosophy) and/or some upper level English courses, with reference to the course structure below. Note that 200 is not open to students with credit in 150/151; such students may take 201, 202, 203 or, with the permission of the Department, substitute for 200 3 units of upper-level English courses. Students may take 310 in their third year, but this option tends to limit one's flexibility in choosing elective courses in the third and fourth years. For the same reason, it is also to a student's advantage to begin work on the second language requirement by the beginning of the second year.

*Third and Fourth Years:* Prerequisites for admission to Third Year Honours include a first or high second class grade in 200 (or 150/151) or 310 and the approval of the Department. Honours students must present at least 24 units of English courses numbered 300 and above, to be distributed according to the following course structure:

- (a) 460, 461 (Third Year Honours courses, 1½ units each);
- (b) 499 (Fourth Year Honours course, 1½ units);
- (c) 351 (*The Canterbury Tales*);
- (d) Either 366 (Shakespeare Survey, 3 units) or 360 (Special Studies in Shakespeare, 1½ units);

- (e) At least 1½ additional units from the period before 1660: 340, 341, 346, 347, 352, 353, 354, 357, 359, 360, 361, 362, 363, 364, 369, 410;
- (f) At least 1½ units from the period 1660-1800: 372, 373, 374, 375, 376;
- (g) At least 1½ units of American or British literature from the period from 1800-1900: 379, 380, 381, 382, 383, 384, 385, 386, 387, 427, 428, 474;
- (h) At least 1½ units of 20th Century American, British or Commonwealth literature: 388, 425, 426, 429, 431, 432, 433, 434, 435, 436, 437, 438, 439. Students with 201/203 may apply for waiver of this requirement;
- (i) At least 1½ units from Canadian literature: 448, 450, 451, 452, 453, 457, 458, 459. Students with 202 may apply for waiver of this requirement;
- (j) At least 1½ units which are interdisciplinary: 340, 341, 346, 347, 413, 414, 415, 440. Some special topics courses in English, as well as Linguistics 388, 389 or 390, and courses in other departments, may also satisfy this requirement with permission of the Director of Honours;
- (k) Electives: at least 6 units (or 7½ units if 360 has been taken instead of 366) from English courses numbered 300 and above (including 310 and 490).

At the end of the Fourth Year, there will be an interview at which students will defend their projects undertaken for 499.

## Combined English Honours and Medieval Studies Minor

Students in the English Honours Program who satisfy the (e) requirement and 1½ units of the (j) requirement as described above with courses from the following list: 340, 341, 346, 347, 352, 353, 354 may earn a combined English Honours and Medieval Studies Minor degree, if they complete in addition MEDI 301 and MEDI 302, together with a further 3 units selected from the Medieval courses (apart from the English courses) which are included in the list of Suggested Courses for the Medieval Studies Program. (See Medieval Studies)

## Counselling

The programs of Honours students are subject to the approval of the Director of Honours Programs, and the choice of electives is subject to modification in light of the student's entire program. Special counselling for students entering the Honours Program, as well as for those already enrolled in it, is available from the Director, who should be consulted as soon as a student develops an interest in the Program.

## Second Language Requirement

English Honours students must demonstrate a basic knowledge of a language other than English, normally Greek, Latin, French, German, Italian, Spanish, or Russian; a student may petition, however, to substitute another language. Students will normally fulfill the requirement by successfully completing 6 units of a language course (or the equivalent) or by successfully completing French 180 or 182, French 300, German 149, or German 390. In certain instances students already fluent in a language may request a translation examination which will be arranged by the Director or Honours.

## Standing at Graduation

An Honours degree is either First or Second Class. A First Class degree requires a first class graduating average (6.50 and above) and at least a B+ in 499 (the Graduating Essay). If an Honours student has a first class graduating average but has scored lower than B+ in 499, the student will be given the option of receiving Second Class Honours or a First Class Major. A Second Class Honours degree requires a second class graduating average (3.50 to 6.49) with at least B- in English 499.

## COMBINED MAJOR IN ENGLISH AND FRENCH (CANADIAN LITERATURE)

The Combined Major in English and French (Canadian Literature) is not a double major in English and French, but a single B.A. degree program composed of selected courses from each department. The term "Canadian Literature" will be formally recognized on the transcript. Students should consult either department about choice of courses.



**First year**

- Two of ENGL 115, 116, 121, 122, 150, 151 (3)  
 FREN 181 and 182 or 190 if necessary (consult French Department about placement) (3)  
 HIST 130 (may be taken in a later year) (3)  
 Electives (6)

**Second year**

- One of ENGL 200, 201, 202, 203 (3)  
 FREN 286/287 AND a grade of B+ or higher in 290 (6)  
 OR a grade of C+ or higher in 292 (6)  
 Electives (15)

NOTE: ENGL 200 is not open to students with credit in 150 or 151. Such students may take 201, 202, 203 or, with the permission of the Department, substitute for 200 3 units of upper-level English courses.

**Third and Fourth years**

- FREN 302 and 3 units of French courses numbered 350 to 477 (6)  
 Courses selected from English Major Course Structure, b) through e), page 76 (7½)  
 ENGL 458 (FREN 487) (1½)  
 Canadian Literature courses, of which at least 4½ upper level units must be taken in each Department (10½)  
 Electives (4½)

**MINOR IN PROFESSIONAL WRITING**

The Departments of English (Humanities) and Writing (Fine Arts) jointly offer a Minor in Professional Writing. Students may obtain a Minor in Professional Writing by completing the course requirements listed below in combination with a Major or Honours Program. The goal of the Program is to provide students with the skills required to succeed as professional writers in journalism, publishing, business, industry, and government.

**1. Applicants for First Year Entry into the Program**

Students must apply to the Admissions Office for acceptance to the University. Entrance to English 181, Writing 103, English 182, or Writing 104 will normally be restricted. Students taking English 099 may not take the courses. In normal circumstances, English 181 or Writing 103 and English 182 or Writing 104 are prerequisites to all other Professional Writing Courses.

**2. Applicants from Other Universities and Colleges**

Students who satisfy the Program's standard either by the production of written work of the passing of courses in Professional Writing at other institutions may be given permission to enter the Professional Writing program at the appropriate level. Only portfolios received between January 15 and March 31 each year will be considered.

**Other Information**

- Entry to third and fourth year courses will depend upon successful completion of the A-level prerequisites listed below and declaration of a major or honours program.
- Students will be admitted to the Program by the Professional Writing Executive Committee which may ask for transcripts, portfolios of previous work, letters of reference, and a personal interview.
- While the Cooperative Education option is not mandatory, priority for admission to some courses will be given to those taking or seeking to take the Cooperative Education option.
- Students are required to take 6 units from the A-level courses and 9 units from the B-level courses listed below. In addition, students must pass an examination after completing the A-level courses.
- Courses taken for the Minor cannot be used to complete requirements for the Major or Honours Program.

**Professional Writing Courses Offered by Department of English****A Level Courses**

- ENGL 181 (WRIT 103) Introduction to Professional Writing I  
 ENGL 182 (WRIT 104) Introduction to Professional Writing II  
 NB: ENGL 181 and ENGL 182 are normally open only to students doing the Minor in Professional Writing. These two courses satisfy the English Department's requirement for entry into 200-level Professional Writing courses. However, they do not satisfy the English Department's prerequisites for other 200-level and above courses; for those prerequisites, see page 79 above.

- ENGL 216 Writing Nonfiction Prose  
 ENGL 226 Writing for Business and Government  
 ENGL 240 Scientific and Technical Writing

**B Level Courses**

- ENGL 401 Hypertext  
 ENGL 406 Advanced Topics in Professional Writing  
 ENGL 412 On-Line Research Techniques  
 ENGL 492 Directed Project in Professional Writing

**Professional Writing Courses Offered by Department of Writing****A Level Courses**

- WRIT 103 Introduction to Professional Writing I  
 WRIT 104 Introduction to Professional Writing II

NB: These two courses satisfy the Writing Department's requirement for entry into 200-level Professional Writing Courses.

- WRIT 215 Intermediate Journalism  
 WRIT 216 Media Culture and Technology

**B Level Courses**

- WRIT 306A Publishing Procedures and Structure  
 WRIT 306B Seminar in Electronic Publishing  
 WRIT 315 Advanced Journalism Workshop  
 WRIT 316 Nonfiction Workshop  
 WRIT 317 Design and Production for Publishing  
 WRIT 330 Reading in Canadian Media and Culture  
 WRIT 404A Introduction to Photojournalism  
 WRIT 404B Intermediate Photojournalism  
 WRIT 404C Advanced Topics in Photojournalism  
 WRIT 404D Advanced Topics in Photojournalism  
 WRIT 415 Seminar in Publishing Policy and Management  
 WRIT 416 Advanced Nonfiction Workshop  
 WRIT 430 Media Analysis

**ADDITIONAL NOTES****Directed Reading**

English 490 and 491 (Directed Reading) are tutorials intended primarily for students in the Honours Program, and must be approved by the Director of Honours and the Chair of the Department. In exceptional cases, Major students facing difficulties in satisfying graduation requirements may apply to the Director of Literature Programs for permission to pursue Directed Readings.

**Variable Content Courses**

The English Department offers a number of variable content courses, with topics advertised annually (353, 360, 362, 372, 385, 388, 391, 392, 393, 394, 400, 404, 413, 415, 425, 426, 438, 448, 449, 462, 471). Where content differs, such courses may be taken more than once for credit, to a maximum of 3 units.

**Course Challenge**

The English Department does not permit students to gain credit by course challenge; students may, however, apply to the appropriate Director (First Year, Majors, or Honours) for waiver of prerequisites in special cases.

**Suggested Electives**

The Department encourages its students to take elective courses supportive to their General, Major or Honours programs. In making their choice of electives, students may wish to give special consideration to relevant courses in Anthropology (e.g. 200); Classics (e.g. 100, 200); Creative Writing; History (e.g. 130, 220); History in Art (e.g. 120, 221); Linguistics; Music (e.g. 110); Philosophy (e.g. 100, 102, 238); Political Science; Psychology; Sociology; Theatre (e.g. 100); and courses in the literature of other languages.

**Requests For Special Admission**

Requests for special admission to courses must be in writing. Please allow a minimum of five working days for processing.

**Preparation for Graduate School**

Major and Honours students planning graduate study are reminded that graduate schools generally require competence in at least one language other than English, and some schools require credits in Old English and/or History of the Language.



## UNDERGRADUATE COURSES

### FIRST YEAR

All students registering for an English course must satisfy the University English Requirement — see English Requirement for Undergraduates, page 13. Students with satisfactory standing may take one of the following sequences — 115/116, 121/122, or 150/151. The development of skills in critical reading, composition, and library use are among the primary objectives of 115/116 and 121/122. 115 stresses expository writing and nonfiction prose, with considerable emphasis on the preparation of a research paper; 116 continues the composition work and provides an introduction to the critical reading of imaginative literature. 121 focuses on the analysis of prose fiction, developing composition skills through the writing of critical essays on novels and short stories; 122 deals with poetry and drama and offers additional practice in the writing of critical essays. 150 is an introductory course to the Medieval and Renaissance periods; 151 covers Eighteenth and Nineteenth Century literature; both 150/151 explore different genres; written work for each course will include essays and an exam; a grade of B in English or English Literature 12, or permission of the Department is a prerequisite for 150/151. Any departure from the normal sequence of 115/116, 121/122 or 150/151, except as described below, must be authorized by the Department.

Those students who, on the basis of their score on the University of Victoria English Placement Essay, are required to take English 099 must register in 099 for the First Term and in English 115 for the Second Term and may not take any other English course until the satisfactory completion of 099. Those who fail 099 in the First Term must repeat the course in the Second Term; any who fail a second time must take and pass the course during the following Summer Studies or they will normally be denied permission to return to the University until they have demonstrated the required level of competence in English. For further information, see English Requirement for Undergraduates, page 15.

Normally, only one English course may be taken in First Term. In special circumstances, however, three units of First Year English may be taken in Second Term, with the permission of the Director of the Writing Program. Three units of credit in First Year English are prerequisite to all other courses in the Department. No supplemental examinations are permitted in any First Year course.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

**ENGL 099 (0) REMEDIAL ENGLISH COMPOSITION** (3 fee units)  
A remedial course in writing required of those whose score on the Placement Test indicates serious deficiencies in composition skills; a workshop approach provides instruction and drill in the fundamentals of reading comprehension and composition, including vocabulary, grammar, mechanics, sentence structure, and paragraphing. Space in the course may be available for other students with writing difficulties who may be advised to take it. For further information, see note above.

(Grading: COM, N or F) (3-0)

### ENGL 115 (1½) COLLEGE COMPOSITION

A study of expository composition and English prose; readings consist mainly of essays for the analysis of ideas and style. Written assignments are designed to improve the student's ability to write clearly and correctly, to organize material, and to carry out basic library research. Students will write a minimum of six essays, including a substantial research paper. (Prerequisite: Fulfillment of the University English Requirement or successful completion of 099) (3-0)

### ENGL 116 (1½) INTRODUCTION TO LITERATURE

A study of prose fiction, poetry, and drama, with practice in the writing of critical essays; students will be assigned a minimum of four essays. (Not open to students with credit in 121 or 122) (Prerequisite: Fulfillment of the University English Requirement) (3-0)

### ENGL 121 (1½) LITERATURE: PROSE FICTION

An introduction to prose fiction; class discussions and essays focus on the analysis and interpretation of short stories and novels. Considerable time will be spent on the writing of critical essays, with special attention to organization, argument, evidence, style, and, as necessary, to grammar; students will be assigned a minimum of four essays. (Not open to students with credit in 116) (Prerequisite: Fulfillment of the University English Requirement) (3-0)

### ENGL 122 (1½) LITERATURE: POETRY AND DRAMA

An introduction to the interpretation of poetry and drama, with continued attention to the writing of critical essays; students will be assigned a minimum of four essays. (Not open to students with credit in 116) (Prerequisite: Fulfillment of the University English Requirement) (3-0)

### ENGL 150 (1½) BRITISH LITERATURE TO 1660

Significant texts from *Beowulf* to *Paradise Lost*; Medieval and Renaissance issues of gender, class, and spiritual thought; literary genres such as the epic, drama, and sonnet. (Not open to students with credit in 200) (Prerequisite: satisfactory standing on the EPE and a grade of B or higher in English 12 or English Literature 12 or — in special cases — permission from the Director of Literature) NO(3-0)

### ENGL 151 (1½) BRITISH LITERATURE FROM 1660-1880

Significant authors from Defoe to Elizabeth Barrett Browning; neo-classical and Romantic/Victorian issues of gender, class, and thought; the epic, the novel, the dramatic monologue, and the sonnet. (Not open to students with credit in 200) (Prerequisite: Satisfactory standing on the EPE, and a grade of B or higher in English 12 or English Literature 12 or — in special cases — permission from the Director of Literature) NO(3-0)

### ENGL 181 (WRIT 103) (1½) INTRODUCTION TO PROFESSIONAL WRITING: I

This lecture/lab will introduce students to the basic skills of professional writing. Entrance restricted to students who have been accepted into the Professional Writing Program. NO(3-0)

### ENGL 182 (WRIT 104) (1½) INTRODUCTION TO PROFESSIONAL WRITING: II

Further studies in the basics of professional writing. NO(3-0)

## SECOND YEAR

At least 3 units of credit in First Year English are prerequisite to future work in the Department. C+ or better in ENGL 116 or 122 (or any equivalent course from another institution) is necessary for registration before August 15th.

### ENGL 200 (3) BRITISH LITERATURE FROM THE AGE OF CHAUCER TO THE ROMANTIC PERIOD

Special emphasis will be placed on works by Chaucer, Spenser, Marlowe, Shakespeare, Donne, Milton, Dryden, Swift, Pope, Fielding, Johnson, Blake, Wordsworth, Coleridge, Keats and Austen. (Not open to students with credit in 150/151) Y(3-0)

### ENGL 201 (3) STUDIES IN MODERN LITERATURE

A study of important works, themes and backgrounds of 20th century literature; texts in poetry, fiction, and drama will be chosen by individual instructors. Y(3-0)

### ENGL 202 (formerly 238) (3) AN INTRODUCTION TO CANADIAN LITERATURE

A survey of Canadian literature, introducing major authors and themes and covering a chronological range of fiction and poetry. The primary emphasis is on the 20th century. Poets to be studied may include Roberts, Lampmann, Pratt, F.R. Scott, Birney, Klein, Page, Cohen, Webb, Atwood, and Ondaatje; fiction writers to be studied may include Grove, O'Hagan, Ross, Gallant, Munro, Wiebe, Hodgins, Kroetsch, and Laurence. Texts for each section are chosen by the individual instructors. Y(3-0)

### ENGL 203 (3) AN INTRODUCTION TO AMERICAN LITERATURE

A survey designed for both those who will continue in American studies and those who will not. Emphasis is on the continuity of the American literary tradition. Readings from the set text will be chosen by the instructor and supplemented by additional readings in the major writers such as Whitman, Hawthorne, Twain, Henry James, Faulkner. Y(3-0)



**ENGL 215 (1½) THE WRITING OF EXPOSITORY PROSE**

This course pays attention to the styles and methods of nonfiction prose writing. It focuses on the development and critical analysis of the student's own writing through numerous and extensive written assignments and through the study of the techniques employed by other writers. The course is open to all students, but is of special relevance to those going into the teaching profession. (Classes will be limited to 20 students) (3-0)

**ENGL 216 (1½) WRITING NONFICTION PROSE**

Intermediate techniques of nonfiction prose; emphasis on clear and organized prose, document design, and appropriate graphics; essays on a range of topics, including natural and social sciences, the arts and humanities, and business and technology; use of computer applications. (Prerequisites: 181 and 182 or WRIT 103 and WRIT 104 with a grade of B or better in both courses) (3-0)

**ENGL 225 (1½) TECHNICAL COMMUNICATIONS: WRITTEN AND VERBAL**

Intended to assist students who plan careers in business, government, public service and research institutions, the course is designed to improve written and oral communication skills in a work environment. Its practical basis, which requires the preparation of business letters, internal memoranda and reports, is supplemented by a theoretical outline of basic communication within an organizational structure. The course offers experience of both individual and group problem-solving. (Prerequisite: 3 units of first year English or permission of Department) (Classes limited to 18) (3-0)

**ENGL 226 (1½) WRITING FOR BUSINESS AND GOVERNMENT**

Examination of business and government reports for diverse audiences; emphasis on clear and concise writing; structure, format, and conventions of several types of business communication; appropriate graphics; workshoping skills; computer applications. (Prerequisites: 181 and 182 or WRIT 103 and WRIT 104 with a grade of B or better in both courses) (3-0)

**ENGL 240 (1½) SCIENTIFIC AND TECHNICAL WRITING**

Essential skills of modern technical writing; preparing a range of technical and scientific materials, for both specialist and non specialist audiences; emphasis on clear and organized prose, document design, the appropriate use of graphics, the testing and revision of all materials; gathering research data; computer applications. (Prerequisites: 181 and 182 or WRIT 103 and WRIT 104 with a grade of B or better in both courses) (3-0)

**ENGL 250 (1½) CONTEXTS OF LITERATURE**

This course is an introduction to the relationships between literature and other aspects of our culture. Students may take 250 for a maximum of 3 units of credit. (Prerequisite: 3 units of first year English) (NOTE: This course is primarily designed as an elective for students not intending to major in English)

This Year:

Section A: American Women in Conflict

An exploration of several American female writers whose work reveals a struggle for personal and social definition. Racial themes will be prominent. (3-0)

Section B: Literature and Sex

An exploration of masculinity and femininity in some contemporary and historical texts; as well as gay and lesbian writing; claims for differences in writing by men and women. (3-0)

**THIRD AND FOURTH YEARS**

There is no academic distinction between 300 and 400 level courses. The only prerequisite for any upper level course, unless noted otherwise below, is 3 units of first-year English.

**ENGL 310 (formerly 345) (3) THE PRACTICE OF CRITICISM**

A seminar designed to extend awareness of how style and form contribute to meaning in literary works; poetic, narrative, and dramatic technique; representative theoretical approaches and their application; the interdependency of literary technique and critical interpretation. Prospective Honours students are strongly advised to take this course in their Second Year. Students will be allowed to select this course only if they have the approval of the Director of Honours. (3-0)

**ENGL 340 (formerly 442 and part of 441) (1½) INTRODUCTION TO OLD ENGLISH**

An introduction to the language, culture, and literature of Anglo-Saxon England, including the study of prose texts and poetry. (3-0)

**ENGL 341 (formerly 443 and part of 441) (1½) OLD ENGLISH LITERATURE**

A study of *Beowulf* and other Old English texts. (Prerequisite: 340) (3-0)

**ENGL 346 (formerly 355) (1½) AN INTRODUCTION TO OLD ICELANDIC**

An introduction to the Old Icelandic language and to the poems and stories — the Eddas and the Sagas — that it preserves. (3-0)

**ENGL 347 (formerly 356) (1½) OLD ICELANDIC LITERATURE**

A study of *Hrafnkel Saga*, *Bandmann Saga*, *Hervarar Saga* and *Heidreks*, and selected Eddic poems. (Prerequisite: 346 or permission of the instructor) (3-0)

**ENGL 351 (1½) CANTERBURY TALES**

An introductory study of Chaucer's poetry focusing specifically on the *Canterbury Tales*. (3-0)

**ENGL 352 (1½) CHAUCER AND HIS CONTEMPORARIES**

A study of the important works of Chaucer outside the *Canterbury Tales*, primarily *Troilus and Criseyde*, and a selection from his dream visions and lyrics. Other Medieval authors may be studied to illuminate the medieval literary traditions in which Chaucer was writing, or which he later influenced. (351 strongly recommended) (3-0)

**ENGL 353 (1½) STUDIES IN MEDIEVAL ENGLISH LITERATURE**

A study of the major literary works and genres of the medieval period (excluding Chaucer). The course will centre on specific genres (romance, drama, lyric, etc.), at the discretion of the instructor, with annual advertisement.

This Year: Middle English Romance

A study of Middle English metrical romances including: *King Horn*, *Havelok the Dane*, *Athelstan*, *Sir Orfeo*, *Sir Launfal*, *Sir Gowther*, *Gamelyn*, *The Squire of Low Degree*. (3-0)

**ENGL 354 (1½) OLD AND MIDDLE ENGLISH LITERATURE IN TRANSLATION**

A survey of English literary texts of the Middle Ages; selections will range from *Beowulf* to medieval lyrics, morality plays, and romances, as well as major works by the *Gawain* poet, Langland, and the Scots poets. The survey does not include Chaucer. (3-0)

**ENGL 357 (1½) THE POETRY OF THE ALLITERATIVE REVIVAL**

Various works within the tradition of Middle English alliterative writings such as Langland's *Piers Plowman*, *Sir Gawain and the Green Knight*, *Pearl*, *The Alliterative Morte Arthure*, *Winner and Waster*, and other related works in both verse and prose. (3-0)

**ENGL 359 (1½) RENAISSANCE LITERATURE**

Major nondramatic literature of the 16th Century. (Not open for credit to students in 419) Texts: Sidney's *Defence of Poesy*; More's *Utopia* and Bacon's *New Atlantis*; lyrics by Sidney and other Elizabethans; and a substantial selection from *The Faerie Queene*. (3-0)

**ENGL 360 (1½) SPECIAL STUDIES IN SHAKESPEARE**

Intensive study of a few plays, with emphasis on related critical issues. Students intending to take this course must have a good knowledge of Shakespeare's work.

This Year:

Section A: Shakespeare Survey I (Individual Studies)

The first of two courses that offer a survey of the works of Shakespeare by Individual Studies, equivalent to English 366. In addition to tutorials and computer labs, students will work with written, audio, and video materials in their own time. Representative histories, comedies and tragedies, dealing with the overall theme of power and justice; introduction to the Renaissance context of the plays. No previous knowledge of Shakespeare necessary. Not open to students with credit for English 366. (3-0)



**Section B: Shakespeare Survey II (Individual Studies)**

The second of two courses that offer a survey of the works of Shakespeare by Individual Studies, equivalent to English 366. In addition to tutorials and computer labs, students will work with written, audio, and video material in their own time. Representative comedies, problem plays, and tragedies, dealing with Shakespeare's plays of love; introduction to critical approaches to Shakespeare. No prerequisite, but English 366A is strongly recommended. Not open to students with credit for English 366. S(3-0)

**Section C: Shakespeare and the Making of History**

A study of seven of Shakespeare's ten history plays, seen in the light of Elizabethan concepts of history, earlier dramatic traditions, and Shakespeare's sources; exploration of moral and political issues arising from the tension between various power structures and the individual. Texts: *King John*, *Richard II*, *Henry IV* (Parts 1 and 2), *Henry V*, *Richard III*, *Henry VIII*. F(3-0)

**Section D: Hunting in Shakespeare**

A study of the motif of hunting in Shakespeare, in relation to the literary, mythological, and pictorial traditions of the hunt and its complex political and social role in Elizabethan England. Works will include *Venus and Adonis*, *Love's Labor's Lost*, *Titus Andronicus*, *Julius Caesar*, *Merry Wives of Windsor*, *Taming of the Shrew*, *As You Like It*, *The Winter's Tale*, *The Tempest*, and selections from contemporary documents. S(3-0)

**ENGL 361 (1½) THE METAPHYSICAL POETS**

Major emphasis will be on Donne, Herbert, Marvell, Vaughan and Traherne. Special attention will be given to the secular love lyric, as well as to the influence of Christian theology and related philosophical traditions. S(3-0)

**ENGL 362 (1½) SPECIAL STUDIES IN RENAISSANCE LITERATURE**

A study of major literary works, genres, or themes of the English Renaissance chosen by the instructor, with annual advertisement. Emphasis will be on nondramatic works.

This Year: Edmund Spenser

The works of Edmund Spenser in their cultural context with central attention to *The Faerie Queene*, the most important non-dramatic work of the Sixteenth Century. S(3-0)

**ENGL 363 (1½) MAGIC, SCIENCE AND RELIGION IN RENAISSANCE LITERATURE**

A study of late 16th and 17th century literature in light of the interrelationships between contemporary magic, science, and theology. A good deal of attention will be paid to this background, but the ultimate purpose of the course is the fuller understanding of the literary texts themselves. Authors to be studied include Marlowe, Shakespeare, Jonson, Donne, Bacon, and Browne. S(3-0)

**ENGL 364 (1½) ELIZABETHAN AND JACOBAN DRAMA**

Main emphasis is on such major Elizabethan and Jacobean dramatists as Marlowe, Webster, Jonson, Middleton and Ford. S(3-0)

**ENGL 366 (formerly 413) (3) SHAKESPEARE SURVEY**

Lectures on the development of Shakespeare's art in the histories, comedies and tragedies. Y(3-0)

**ENGL 369 (1½) MILTON: MAJOR POETRY AND SELECTED PROSE**

F(3-0)

**ENGL 372 (1½) SPECIAL STUDIES IN 18TH CENTURY LITERATURE**

A study of a major aspect of literature in the century. The specific focus of the course will be determined by the instructor and advertised annually.

This Year: Utopia & Dystopia in 18th Century Novels by Women

A study of utopian and dystopian ideas in novels by women from Sarah Fielding to Elizabeth Hamilton. For these authors, only a limited utopia is possible, for example in an extended family or a single village, and the "real" (dystopian) world is usually a powerful force threatening its weak stability. F(3-0)

**ENGL 373 (1½) ENGLISH LITERATURE OF THE RESTORATION PERIOD: 1660-1700**

Poetry, prose and drama (excluding Milton's) produced between the Restoration of Charles II in 1660 and the close of the 17th century; particular emphasis will be placed upon Dryden and Restoration Comedy. S(3-0)

**ENGL 374 (1½) SWIFT, POPE, AND THE LITERATURE OF THE AUGUSTAN AGE: 1701-1745**

An intensive study of the great age of English satire, with particular emphasis on Swift, Pope and the other satirists of the reigns of Queen Anne and the first two Georges. F(3-0)

**ENGL 375 (1½) JOHNSON, BLAKE AND THE LATER 18TH CENTURY**

A preliminary account of English neoclassicism followed by a study of literature of the Age of Sensibility with special emphasis on Samuel Johnson and his circle and on William Blake. F(3-0)

**ENGL 376 (formerly 423) (3) THE BEGINNING OF THE BRITISH NOVEL IN THE 17TH AND 18TH CENTURIES**

Main emphasis is placed on the 18th century novel — with some attention to the social and intellectual background of the period, when this appears to illuminate the novels. Y(3-0)

**ENGL 379 (1½) BRITISH FICTION AND NON-FICTION OF THE EARLY NINETEENTH CENTURY**

A study of prose writings of the Romantic period; novels and influence of Jane Austen and Sir Walter Scott; Gothic novels, historical novels, and novels of manners; significant works of non-fiction prose, including DeQuincey and Carlyle; essays, autobiography and stories of the period. F(3-0)

**ENGL 380 (formerly part of 384) (1½) THE EARLY VICTORIAN NOVEL**

A study of major achievements in British fiction during the first half of the Victorian period (1837-70); focus on works by the Brontës, Dickens, and Thackeray; other authors might include Trollope, Gaskell, Collins, Carroll, and the early George Eliot. (Not open to students with credit in 384) S(3-0)

**ENGL 381 (formerly part of 384) (1½) THE LATER VICTORIAN NOVEL**

The English novel in the last decades of the Nineteenth Century; focus on works by George Eliot, Thomas Hardy, Robert Louis Stevenson, and Oscar Wilde; movements such as the Romantic revival, aestheticism, and naturalism. (Not open to students with credit in 384) NO(3-0)

**ENGL 382 (formerly half of 430) (1½) THE ROMANTIC PERIOD: I**

Studies in Wordsworth and Coleridge. F(3-0)

**ENGL 383 (formerly half of 430) (1½) THE ROMANTIC PERIOD: II**

Studies in Keats, Shelley, and Byron. S(3-0)

**ENGL 385 (1½) SPECIAL STUDIES IN 19TH CENTURY BRITISH LITERATURE**

A study of a specific theme, problem or author of the 19th century. The specific topic will be determined by the instructor and advertised annually.

This Year: The Victorian Mystery Novel

A study of 19th century mystery fiction. Texts: Edgar Allan Poe, *The Murders in the Rue Morgue*; Charles Dickens, *Bleak House* and *The Mystery of Edwin Drood*; Wilkie Collins, *The Moonstone*; Mary Elizabeth Braddon, *Lady Audley's Secret*; Conan Doyle, *A Study in Scarlet*. F(3-0)

**ENGL 386 (1½) VICTORIAN POETRY AND THOUGHT: I**

Studies in Tennyson and Arnold, with additional readings from such prose writers as Mill, Carlyle, and Newman. F(3-0)

**ENGL 387 (1½) VICTORIAN POETRY AND THOUGHT: II**

Studies in the Brownings, Hopkins, Christina Rossetti, and the Pre-Raphaelite poets, with additional readings from such prose writers as Carlyle, Ruskin, Pater, and Morris. S(3-0)



**ENGL 388 (1½) SPECIAL STUDIES IN 20TH CENTURY BRITISH LITERATURE**

A study of a specific theme, problem or author of the period. The specific topic will be determined by the instructor and advertised annually.

This Year:

Section A: The Inklings

A study of the major literary figures in this loosely organized group to whom both literary and spiritual matters were essential. Writers include C.S. Lewis, Charles Williams, and J.R.R. Tolkien. F(3-0)

Section B: The Bloomsbury Group

The "Bloomsbury Group" was a loose association of writers, painters, and intellectuals who flourished in the early 20th Century. The course will concentrate on the writings of Lytton Strachey, Virginia Woolf, and E.M. Forster, but the range of the group's achievement will also be indicated by reference to Roger Fry, Vanessa and Clive Bell, and Leonard Woolf. S(3-0)

**ENGL 391 (1½) SPECIAL STUDIES IN LITERARY GENRE** NO(3-0)

**ENGL 392 (1½) STUDIES IN A MAJOR FIGURE** NO(3-0)

**ENGL 393 (1½) MYTH AND LITERATURE** NO(3-0)

**ENGL 394 (1½) THEMATIC APPROACHES TO LITERATURE**

This Year: The Poetry of Female Desire: 19th- and 20th-Century Love Poetry by Women

An examination of a wide range of nineteenth- and twentieth-century women's poetry in light of recent feminist theories of the formulation of female desire. Will explore such questions as whether such a construct exists, and if it does how it differs from the traditional psychoanalytic construct of male desire, through an exploration of the poetry of both canonical and non-canonical women writers. F(3-0)

**ENGL 395 (1½) SPECIAL TOPIC IN CULTURAL STUDIES**

Study of topics based in popular and/or high culture; may include popular fictions, films, and a variety of texts, linking them to wider social signifying practices. NO(3-0)

**ENGL 400 (1½) ADVANCED WORKSHOP IN COMPOSITION**

The course will offer workshops in general and specialized kinds of writing. Different sections will concentrate on such problems as stylistics, modern theories of grammar, technical writing, business writing, preparation of briefs and reports. The topic for each section will be announced annually. Classes will be limited to 18 students. The course may be taken for a maximum of 3 units with departmental permission, but only 1½ units may be used to complete the requirements for a general, major or honours program in English.

This Year:

Section A: Workshop in Expository Prose

This course will offer students practice in the writing and criticism of expository prose. Competence in the English language is a prerequisite. F(3-0)

Section B: Hypertext Writing

Workshop in writing and design problems imposed by hypertext; audience, style, structure, and format; techniques of planning and workshoping; production of hypertext documents from a range of disciplines; techniques of annotation, linking, and navigation; document testing and revision; graphics, video, and sound; becoming proficient in selected applications (SuperCard and HTML for the WWW). (Prerequisites: A 200-level writing course or permission of the instructor) S(3-0)

**ENGL 401 (1½) HYPERTEXT**

Workshop in solving writing and design problems imposed by hypertext; the audience, style, structure, and format of hypertext; techniques of planning and workshoping. (Prerequisites: Three units of 200-level Professional Writing courses) NO(3-0)

**ENGL 402 (1½, formerly 3) CHILDREN'S LITERATURE**

The study of a selection of works drawn from various genres and periods of children's literature, including novel, folk tale, myth, fantasy and picture book. F(3-0)

**ENGL 403 (formerly 302) (1½, formerly 3) LITERARY APPROACHES TO CHILDHOOD AND ADOLESCENCE**

The course explores literary works, mainly of the 20th century, that dramatize adult attitudes to children and the behaviour of young persons during childhood and adolescence in the context of relevant theories concerning child development. The approach is cross cultural. Supplementary film or other material will be used as available. S(3-0)

**ENGL 404 (1½) SPECIAL STUDIES IN CHILDREN'S LITERATURE**

A study of a special topic in children's literature. The specific topic will be determined by the instructor and advertised appropriately. NO(3-0)

**ENGL 406 (1½) ADVANCED TOPICS IN PROFESSIONAL WRITING**

Workshops in specialized topics in professional writing, such as computer documentation, operation manuals, and usability testing; topic will be announced annually; may be taken for a maximum of 3 units with permission. (Prerequisites: Three units of 200-level Professional Writing courses) NO(3-0)

**ENGL 409 (formerly 365) (1½) THE BIBLE IN ENGLISH**

A course in the Bible as Literature, surveying basic books of the Old and New Testaments, such as Genesis, Deuteronomy, Job, Song of Songs, Psalms, selected Wisdom Literature, Isaiah, selected minor prophets, Matthew, John, Acts, selected Pauline epistles, Hebrews and Revelation. Attention will be paid to the historical influence of the English Bible on the style and structure of English literature, as well as to the intrinsic literary features of the Biblical books themselves. (Not applicable as Renaissance credit for Major and Honours students) S(3-0)

**ENGL 410 (3) BACKGROUNDS TO ENGLISH LITERARY TRADITIONS**

A study of the main currents of thought contributing to late Medieval and Renaissance Literature. The development of literary vocabulary in the Judaeo-Christian tradition. Y(3-0)

**ENGL 412 (1½) ON-LINE RESEARCH TECHNIQUES**

Workshop in the techniques of electronic research; a major research project drawn from the student's own interests and expertise; practical knowledge of Internet tools. (Prerequisites: Three units of 200-level Professional Writing courses) NO(3-0)

**ENGL 413 (formerly 405) (1½) STUDIES IN FILM AND LITERATURE**

A study of various relationships between the art of film and relevant literary works. Topics will vary and will be announced annually. English major and honours students may take this course as an elective only. Can be taken more than once for credit, to a maximum of 3 units. A fee will be assessed and the student should consult the department concerning the amount.

This Year: Filming the Middle Ages

An examination of a representative sample of films and related texts set in the Middle Ages. In the diverse literary and film treatments of such legendary or historical figures as Arthur, Henry V, Ivanhoe and Joan or Arc, we may hope to trace evolution of medievalism, that blend of attitudes and beliefs through which our understanding of the Middle Ages is filtered. S(3-0)

**ENGL 414 (1½) AMERICAN FILM**

A study of major accomplishments in American film. The course will consider film as both a narrative form and a means of reflecting social concerns. Some screenplays may be studied, and essays will be required. A fee will be assessed and the student should consult the department concerning the amount. F(3-0)

**ENGL 415 (1½) SPECIAL STUDIES IN FILM**

A study of a special topic in English-language cinema. A fee will be assessed and the student should consult the department concerning the amount.

This Year: The Cinema World of John Huston: 1941-1989 F(3-0)



**ENGL 425 (formerly 380) (1½) SPECIAL STUDIES IN THE LITERATURE OF THE UNITED STATES**

A study of American literature which will focus attention on a specific theme, problem, genre or author at the discretion of the instructor, advertised annually.

This Year:

Section A: Allen Ginsberg & Bob Dylan

A detailed study of the works of Allen Ginsberg and Bob Dylan, and of their collaborations and influences upon each other. S(3-0)

Section B: The American Short Story

Examination of selections from the works of Sherwood Anderson, F. Scott Fitzgerald, Ernest Hemingway, and William Faulkner; the short stories as individual works of art; also exploring influences among the authors, biographical connections, and the tenor of the times. S(3-0)

**ENGL 426 (1½) COMPARATIVE STUDIES IN NORTH AMERICAN LITERATURE**

This Year: Gender Politics in the Poetry of Margaret Atwood & Marge Piercy

An examination of feminist issues in the poetry of two major twentieth-century women poets, with particular attention to the volatile area of male-female relationships. Will study each poet's handling of such relationships in light of contemporary psychoanalytic theory in order to explore the fascinating question of how gender inequality affects intimate interpersonal relationships, and how the dynamics of such relationships in turn affect gender politics on a larger scale. F(3-0)

**ENGL 427 (1½) THE AMERICAN RENAISSANCE**

A study of the period 1840-1860 which saw the rise to full maturity of a distinctively American literature. Emphasis will be placed on the major figures — Poe, Emerson, Thoreau, Hawthorne, Dickinson, Melville, and Whitman — and on the literary developments and movements in prose and poetry. F(3-0)

**ENGL 428 (3) AMERICAN FICTION TO 1900**

A survey of major American fiction in the 19th century. The first term will be a survey of the period from Brockden Brown, Cooper and Hawthorne to Crane, Norris and Dreiser; the second term will be an intensive study of the development and achievement of three major figures: Melville, Twain and James. Y(3-0)

**ENGL 429 (3) 20TH CENTURY AMERICAN FICTION**

A study of representative works of American fiction in the twentieth century and of the changing social and intellectual settings the works reflect. Authors to be covered include such early figures as Stein, Anderson, Hemingway, and Faulkner, as well as important contemporary figures such as Bellow and others to be announced. Y(3-0)

**ENGL 431 (1½) MODERN AMERICAN POETRY: I**

Readings in American poetry of the period 1910-50. The main poets studied will be Robert Frost, Wallace Stevens, William Carlos Williams, and Hart Crane. Contextual reference will be made to other poets such as Marianne Moore, E.E. Cummings, and the Fugitives. F(3-0)

**ENGL 432 (1½) MODERN AMERICAN POETRY: II**

Detailed study of poets and poetry movements since 1950 such as the following: John Crowe Ransom, Allen Tate and the Fugitive Group; Charles Olson and the Black Mountain Movement; Allen Ginsberg, Gary Snyder and the Beat Generation; Robert Bly and "deep image" poetry; Robert Lowell, Sylvia Plath, and the confessional poets; John Berryman, Theodore Roethke, John Ashbery. S(3-0)

**ENGL 433 (1½) MODERN ANGLO-IRISH LITERATURE**

Focuses primarily but not exclusively on the Irish Renaissance; emphasis will be placed on Wilde, Yeats, and Joyce, and other authors to be studied may include Shaw, Synge, Stephens, O'Casey, Clarke, O'Connor, and Beckett. The background of ideas and social forces in the period will receive some attention. F(3-0)

**ENGL 434 (1½) BRITISH POETRY FROM 1914 TO THE PRESENT DAY**

This course will include discussion of the main poetic movements of the period, together with explanations of the work of individual poets, such as Wilfred Owen, T.S. Eliot, David Jones, Dylan Thomas, W.H. Auden, W.B. Yeats, D.H. Lawrence, Hugh MacDiarmid, and others. S(3-0)

**ENGL 435 (formerly 465) (1½) MODERNIST POETRY (YEATS, POUND AND ELIOT)**

A course on the three major international Modernist English-language poets. S(3-0)

**ENGL 436 (3) 20TH CENTURY BRITISH FICTION**

Close study of one or more of the works of prominent novelists. Emphasis is both critical and historical. Essays are required and students are urged to form their own judgments with little reference to the works of critics. The course may include the following authors: Joseph Conrad, E.M. Forster, James Joyce, Virginia Woolf, D.H. Lawrence, Evelyn Waugh, Graham Greene, Samuel Beckett, Anthony Burgess, Margaret Drabble, Iris Murdoch, William Golding, Ian McEwan, Fay Weldon and John Fowles. Y(3-0)

**ENGL 437 (3) BRITISH AND AMERICAN DRAMA SINCE WORLD WAR I**

A study of the play as a literary form and an examination of styles, techniques, themes and moods which have been explored in 20th century drama, including a brief historical survey of the 19th century theatre. Some attention will be paid to the techniques of acting and direction, theatre design, and audience requirements which have influenced the playwright; however, this is not a practical theatre course. Essay topics will encourage development of the student's own critical ability. Throughout, concentration will be on the text rather than on the works of critics. Y(3-0)

**ENGL 438 (1½) SPECIAL STUDIES IN COMMONWEALTH AND POSTCOLONIAL LITERATURES**

A study of a major aspect of commonwealth or post-colonial literature. Specific focus of the course will be determined by the instructor and advertised annually. (3-0)

This Year: The Diasporic Experience

Examples from contemporary literatures in English explore English literature as redefined by 'exiles and émigrés' from the 'old Commonwealth'; challenges to existing canons and established critical assumptions; the diasporic experience; nationalism and multiculturalism; respect for minority cultures. F(3-0)

**ENGL 439 (3) COMMONWEALTH AND POSTCOLONIAL LITERATURES**

The course offers an introduction to the literature of new and emergent countries. It will discuss problems of regionalism, immigration, native rights and national myths as processes of self definition. Works from Australia, New Zealand, the Caribbean and sub-Saharan Africa will be studied; comparisons will be made with aspects of Canadian cultural development. Y(3-0)

**ENGL 440 (1½) THE HISTORY OF THE ENGLISH LANGUAGE**

A survey of the development of the English Language from its Germanic origins to the 19th century, with particular reference to semantic, etymological, phonetic, morphological and syntactic modifications of primary importance to an understanding of English literature. S(3-0)

**ENGL 448 (1½) SPECIAL STUDIES IN CANADIAN LITERATURE**

A study of a major theme, problem, genre or author in Canadian Literature, determined by the instructor and advertised annually.

This Year: Canadian Postmodern Literature

A study of selected postmodern fiction and poetry in the context of recent theories of postmodernism. The aesthetic, ideological and cultural implications of the postmodern tradition in Canada. F(3-0)



**ENGL 449 (1½) SPECIAL STUDIES IN CONTEMPORARY LITERATURE**

A study of significant literary works published during the past 15 years. The course will focus on themes and issues engaged by authors from throughout the English-speaking world. (Sample authors: Patrick White, John Fowles, Robertson Davies, Chinua Achebe, John Ashbery, Ian McEwan)

This Year: Constructing an Audience

A study of the cultural processes of constructing an audience. Among the issues considered: interpolating the subject; defining an academic audience and a teachable text; constructing racial and national identities; theories of spectatorial politics; electronic transformations of the audience; gendering the audience; creating an avant-garde audience; selling an audience. S(3-0)

**ENGL 450 (1½) MODERN CANADIAN FICTION: I**

A study of important Canadian authors who came to prominence in the two decades following World War II; major figures considered may include Hugh MacLennan, Mordecai Richler, Ernest Buckler, Robertson Davies, and Margaret Laurence. Some attention will also be paid to the development of the short story in these years. F(3-0)

**ENGL 451 (1½) MODERN CANADIAN FICTION: II**

A study of Canadian novelists and short story writers who have achieved recognition in recent years; major figures considered may include Margaret Atwood, Alice Munro, Robert Kroetsch, Rudy Wiebe, and Jack Hodgins. S(3-0)

**ENGL 452 (formerly part of 397) (1½) MODERN CANADIAN POETRY: I**

A study of important Canadian poets who came to prominence in the two decades following World War II; major figures considered may include F.R. Scott, Dorothy Livesay, Earle Birney, Irving Layton, Leonard Cohen, and P.K. Page. F(3-0)

**ENGL 453 (formerly part of 397) (1½) MODERN CANADIAN POETRY: II**

A study of Canadian poets who have achieved recognition in recent years; major figures considered may include Phyllis Webb, Al Purdy, Margaret Atwood, and Michael Ondaatje. S(3-0)

**ENGL 457 (formerly 438) (3) TRADITIONS IN CANADIAN LITERATURE**

Important figures in Canada's literary development, with substantial consideration of historical, geographical, social, literary, and aesthetic influences in English and French-Canadian literature during the 19th and 20th centuries; amongst the authors to be included: Moodie, Hemon, Leacock, Grove, Pratt, MacLennan, Blais, Laurence, Davies, Ryga, Reaney, Hebert, Atwood, Layton, Birney, Avison, and selected contemporary writers. Y(3-0)

**ENGL 458 (FREN 487) (1½) COMPARATIVE STUDIES IN CONTEMPORARY FRENCH AND ENGLISH CANADIAN LITERATURE**

An introduction to the comparative study of contemporary Canadian Literature in both official languages. Classes will be conducted in English; readings and assignments can be done in either language. However, students taking a Combined Major in Canadian Literature must read the texts in the original. S(3-0)

**ENGL 459 (1½) EARLY CANADIAN PROSE LITERATURE**

A study of English Canadian prose literature from its beginnings to the early twentieth century. Main focus will be on the development of the novel, but attention will also be paid to the short story and non-fiction prose. Authors may include John Richardson, William Kirby, Susanna Moodie, Sara Jeannette Duncan, F.P. Grove, Martha Ostenso, Morley Callaghan, Sinclair Ross, and Howard O'Hagan. F(3-0)

**ENGL 460 (formerly 446) (1½) FOURTH YEAR HONOURS SEMINAR**

A seminar in the history of critical theory, with a study of its relation in practice to specific genres and styles. F(3-0)

**ENGL 461 (1½) INTRODUCTION TO CONTEMPORARY LITERARY THEORY**

Literary theory studies what literature is, how it functions, and how it produces meaning. On the one hand, literary theory illuminates the norms, conventions, and rules that make literature possible. On the other hand, literary theory reflects on the function and meaning of criticism itself. Students will become familiar with such theories as New Criticism, Structuralism, Psychoanalytic theory, Hermeneutics, Deconstruction, Marxist Criticism, and Feminist Criticism; they will then be able to work with theoretical concepts, issues, and terminology. (Not open to students who have credit for this course as 447) FS(3-0)

**ENGL 462 (1½) STUDIES IN MODERN CRITICAL THEORY**

A study of selected topics in modern literary theory and criticism. The specific topic will be advertised annually. NO(3-0)

**ENGL 463 (1½) STUDIES OF WOMEN AND CRITICAL THEORY**

This Year: Minority Women's Writing and Feminist Critical Theory  
An exploration of minority women's writing which challenges the new orthodoxies of women's literature; Black, Indigenous, post-colonial, non-western. The course will consider some mainstream perspectives in feminist criticism and read these in relation to selected minority texts. S(3-0)

**ENGL 470 (1½) WOMEN'S LITERARY TRADITIONS**

A variable content course which explores the role of women writers in any area of literary history; it may examine specific genres or themes used by women authors.

This Year: Women's Poetry

How women's poetry has explored feminist issues while attempting to subvert, displace, or transform a predominantly masculine literary tradition. Special emphasis on concepts of female identity and on forms of bonding among women. F(3-0)

**ENGL 471 (formerly 399) (1½) WOMEN AND LITERATURE**

A variable content course involving texts by and about women, and examining feminist perspectives on literature.

This Year:

Section A: The Three Emilies

A study of Canadian poet Dorothy Livesay and three women artists who influenced her; Emily Brontë's *Wuthering Heights* and selected poetry; Emily Dickinson's poetry; Emily Carr's autobiography and painting; Livesay's works. S(3-0)

Section B: Constructions of the Feminine in the Poetry of Christina Rossetti and Emily Dickinson

An examination of the female subject in the poetry of two nineteenth-century poets. Will use current psychoanalytic theories of subjectivity to illuminate each poet's notion of "the feminine" and the freedoms and restrictions that this implied, with particular attention to common themes such as starvation and plenitude, depression and madness, emotional dependency and unrequited love, the celebration of female creativity, religious doubts and attitudes toward death, and the dilemma of the female artist within patriarchy. S(3-0)

**ENGL 472 (1½) GENDER ISSUES IN LITERATURE**

NO(3-0)

**ENGL 473 (1½) WOMEN WRITERS IN ENGLISH FROM THE MEDIEVAL TO THE AUGUSTAN AGE**

An examination of early women writers' responses to major literary genres; social, political, and spiritual issues; interaction with recognized male writers; distinctive literary traditions and relationships. (*Strongly recommended*: 150/151 or 200; students without these courses should obtain instructor's advice about background reading before the course begins.) NO(3-0)

**ENGL 474 (1½) WOMEN WRITERS FROM THE AGE OF SENSIBILITY TO THE VICTORIAN ERA**

An examination of women writers from Burney to Eliot; major literary genres; social, political, and spiritual issues; interaction with male writers; formation of distinctive literary traditions and relationships. (*Strongly recommended*: 150/151 or 200; students lacking these courses should obtain instructor's advice about background reading before the course begins.) NO(3-0)



**ENGL 490 (1½) DIRECTED READING IN ENGLISH**

A specified reading project in some area of English literature to be determined by the student and the instructor; written assignments will be required. Students registering for this course must first obtain the approval of the individual instructor, the Director of Majors or Honours, and the Chair of the Department. (NOTE: Please consult Department policy on "Directed Reading" in the General Information section.) (3-0)

**ENGL 491 (1½) DIRECTED READING IN ENGLISH**

Further supervised study in some area of English literature; written assignments will be required. Students registering for this course must first obtain the approval of the individual instructor, the Director of Major Programs or the Director of Honours Programs, and the Chair of the Department. (Persons who have received three units of credit for 490 prior to 1976-77 will not be allowed to take 491.) (NOTE: Please

consult Department policy on "Directed Reading" in the General Information section.) (3-0)

**ENGL 492 (1½) DIRECTED PROJECT IN PROFESSIONAL WRITING**

A specific writing project in some area of Professional Writing to be determined by the student and the instructor. Students registering for this course must first have the approval of the instructor, the Director of the Writing Program, and the Chair of the Department. (Prerequisites: Three units of 200-level Professional Writing courses) (3-0)

**ENGL 499 (1½) GRADUATING ESSAY OR DIRECTED READING PROJECT IN HONOURS**

The graduating essay or directed reading project will be done under the guidance of an individual tutor assigned in Third and Fourth years. (Prerequisite: Honours standing in Fourth year) (0-0-2)

## ENVIRONMENTAL STUDIES PROGRAM

Paul R. West, B.Sc., Ph.D. (McM.), Associate Professor and Director of the Program

Michael M'Gonigle, M.Sc. (Lond. Sch. Econ.), LL.B. (Tor.), LL.M., J.S.D. (Yale), Professor and Chair in Environmental Law and Policy

Nancy Turner, B.Sc., Ph.D. (U. of Vic.), Professor

Duncan M. Taylor, B.A. (Queen's), Ph.D. (Calif.-Santa Cruz), Assistant Professor

*Advisory Committee:*

Geraldine A. Allen, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Ore. State), Associate Professor, Biology. Term expires July 1, 1996

George A. Beer, B.A.Sc. (Brit. Col.), Ph.D. (Sask.), Professor, Physics. Term expires July 1, 1996

Alan R. Drengson, B.A., M.A. (Wash.), Ph.D. (Ore.), Associate Professor, Philosophy. Term expires July 1, 1995

A. Rodney Dobell, B.A., M.A. (Brit. Col.), Ph.D. (M.I.T.), Professor, Human and Social Development. Term expires July 1, 1995

Michael C.R. Edgell, B.A. (Birm.), Conservation Dip. (Lond.), Ph.D. (Birm.), Associate Professor, Geography. Term expires July 1, 1997

Martha McMahon, B.A. (Univ. Coll., Dublin), M.A., Ph.D. (McM.), Assistant Professor, Sociology. Term expires July 1, 1997

Hans-Holger Rogner, Dipl.Ind.Eng., Ph.D. (Karlsruhe), Associate Professor, Mechanical Engineering. Term expires July 1, 1996

Gloria J. Snively, B.Sc. (Portland St.), Ph.D. (Brit. Col.), Associate Professor, Education. Term expires July 1, 1995

Christine St. Peter, B.A. (Tor.), M.A. (York), Ph.D. (Tor.), Associate Professor, Women's Studies. Term expires July 1, 1997

Christopher Tollefson, B.A. (Queen's), LL.B. (U. of Vic.), Assistant Professor, Law. Term expires July 1, 1995

Victoria Wyatt, B.A. (Kenyon Coll.), M.A., M.Phil., Ph.D. (Yale), Associate Professor, History in Art. Term expires July 1, 1995

*Student Representatives:*

Jennifer Bonnell

Blair King

Sarah Hutcheson

The Environmental Studies Program is designed to provide students with a broad perspective on the environment. Although a number of departments have developed curricula which provide their students with in-depth preparation for addressing environmental issues from their disciplinary perspectives, the role of the Environmental Studies Program is to integrate the knowledge and methodology from a wide range of viewpoints. Environmental problems by nature encompass more than a single area; hence the need for an interdisciplinary program.

The Program is structured to serve those students with a general academic interest in environmental topics as well as those with a professional interest in the environment. It aims to solve complex environmental problems through a broad understanding of what each of the disciplines can contribute to this process. Since the courses in the Program consider natural, human and cultural phenomena in the context

of technology and environmental management, they provide a useful basis for the interdisciplinary study of environmental issues.

Students are required to combine studies in a traditional discipline with their Environmental Studies Program in order to obtain a degree notation that includes Environmental Studies. Students undertake the Major in Environmental Studies together with a Major in another department (a Double Major — see page 42) or a Major with an Honours Program (Honours/Major — see page 42) or with a major in another faculty (see Interfaculty Double Major, page 42). These programs lead to either a B.A. or a B.Sc. degree. A General Program leading to a B.A. is also offered. By completing the requirements for the General Program together with a Major or Honours Program in another department or faculty, students may obtain a Minor (see Minor and Interfaculty Minor, page 43). Students considering the Environmental Studies Program are advised to contact the Director for counselling and to register in the Program as soon as possible.

Although entry into the Program is possible at any time during undergraduate studies, many eligible courses in the Environmental Studies Program are 300 and 400 level courses with prerequisites; students should therefore plan early to incorporate these prerequisites into their schedule.

When choosing electives, the student is also encouraged to include courses in French and in areas other than the one in which the student is majoring, e.g., if the student is majoring in Science, electives should be chosen from the Social Sciences or Humanities.

**LIMITATION OF ENROLLMENT**

Students are advised that because of restricted facilities and staff, it may be necessary to limit enrollment in certain Environmental Studies courses. Access will be determined in the first instance by strict adherence to prerequisites including third year standing for all courses. Preference is given to students completing Major and Minor degree programs in Environmental Studies. Academic standing may be taken into account in determining enrollment in third year courses.

## MAJOR AND GENERAL PROGRAMS IN ENVIRONMENTAL STUDIES

**MAJOR**

- (a) Completion of another Major or Honours program in the Faculty of Arts and Science, i.e., only a double Major or Honours/Major program is available. In consultation with the Program Director, students may apply for the Interfaculty Double Major (page 42) which involves completing the major in Environmental Studies and the appropriate degree program in another faculty.
- (b) A first and second year (lower level) program that includes courses selected from at least two areas (Science, Social Sciences, Humanities). At least three units in each of the two areas are required. Students are advised that GEOG 101A and 101B are prerequisites for ES 316 (GEOG 350A), BIOL 150A and B (or BIOL 11 and 12) and STAT 255 or 260 for BIOL 215 and for ES 310 (BIOL 330), and ECON 201 for ES 312 (ECON 330). The following are recommended courses.



**Science**

BIOC 201 (1½)  
 BIOL 150A (1½), 150B (1½), 210 (1½), 215 (1½)  
 CHEM 101 (1½), 102 (1½)  
 EOS 100 (1½), 101 (1½)  
 MICR 200 (3)  
 PHYS 102 (3)

**Social Sciences**

ANTH 100A (1½), 100B (1½)  
 ECON 201 (1½), 202 (1½)  
 GEOG 101A (1½)  
 GEOG 101B (1½), 214 (1½), 215 (1½)  
 POLI 100 (3), 250 (1½)  
 SOCI 100 (1e1/2)

**Humanities**

CLAS 100 (3)  
 ENGL 115 (1½), 121 (1½), 215 (1½), 225 (1½)  
 HIST 105 (3), 260 (1½)  
 PHIL 100 (3), 220 (1½), 232 (1½)  
 WS 200A (1½), 200B (1½)

(c) Three units in quantitative concepts and methods, preferably through CSC 100 or 110 and STAT 255, or STAT 255 followed by CSC 200, but this requirement may also be met by the following alternative courses: ANTH 316/317, BIOL 251, ECON 240/340, GEOG 321/425 or 425/426, PHIL 203, PSYC 300A/300B, SOCI 371/471, or STAT 255/256. When the outside Major or Honours program requires the three units of quantitative concepts/methods, the course(s) chosen to satisfy this requirement may form part of that Major or Honours program.

(d) A minimum of fifteen upper level Environmental Studies units selected as follows:

- (i) 7½ units of upper level core course requirements to be taken in the third and fourth years  
 ES 300A (1½), ES 300B (1½), ES 410 (1½), and 3 units selected from ES 310 (BIOL 330) (1½), ES 312 (ECON 330) (1½), ES 314 (PHIL 333) (1½), ES 316 (GEOG 350A) (1½).
- (ii) 7½ additional units selected from the following:

**Environmental Studies (at least 3 units)**

ES 310 (1½), 312 (1½), 314 (1½), 316 (1½), if not selected in (i) above  
 ES 350 (1½), 351 (1½)  
 ES 400A-D (1½) each  
 ES 412 (1½), 414 (1½), 416 (1½), 418 (1½), 420 (1½)  
 ES 422 (1e1/2), 424 (1½), 450 (1½), 490 (1½)

Up to 4½ units may be chosen from the following courses:

**Sciences**

BIOC 300 (3) General Biochemistry  
 BIOL 311A (1½) (formerly half of 311) Physical and Geological Oceanography  
 BIOL 311B (1½) (formerly half of 311) Chemical and Biological Oceanography  
 BIOL 408 (1½) The Biology of Pollution  
 CHEM 302 (1½) Industrial Chemistry with Special Reference to Air Pollution  
 CHEM 303 (1½) Industrial Chemistry with Special Reference to Water Pollution  
 PHYS 310A (1½) Physics and Technology of Energy

**Social Sciences**

ANTH 304 (1½) Technology in Culture  
 ANTH 401 (1½) Cultural Ecology  
 ECON 430A (1½) Natural Resource Economics  
 ECON 430B (1½) Topics in Natural Resource Economics  
 GEOG 450A (1½) Decision Making in Resource Management: Theory  
 GEOG 450B (1½) Decision Making in Resource Management: Practical Applications  
 GEOG 455 (1½) (formerly 459A and B) Parks and Wilderness

POLI 457 (1½) The Politics of Environmental and Natural

Resource Policy

PSYC 350 (3) Environmental Psychology

SOCI 465 (1½) Environmental Sociology

**Humanities**

CLAS 376 (1½) Ancient Science and Technology

HIST 396 (1½) Special Topics in the History of Science

PHIL 332 (1½) Philosophy and Technology

**Note:** None of the courses selected in (d:i) and (d:ii) will be counted toward the Environmental Studies Major if they are declared as part of the outside Major or Honours requirements. With the written approval of the Director, other upper level courses may be approved under (d:ii) above.

**GENERAL**

(a) A first and second year (lower level) program that includes courses selected from at least two areas (Sciences, Social Sciences, Humanities). At least three units in each of the two areas are required. Students are advised that GEOG 101A and 101B are prerequisites for ES 316 (GEOG 350A), BIOL 150A and B (or BIOL 11 and 12) and STAT 255 or 260 for BIOL 215 and for ES 310 (BIOL 330), and ECON 201 for ES 312 (ECON 330). The following are recommended courses.

**Science**

BIOC 201 (1½)  
 BIOL 150A (1½), 150B (1½), 210 (1½), 215 (1½)  
 CHEM 101 (1½), 102 (1½)  
 CSC 100 (1½) or 110 (1½), 200 (1½)  
 EOS 100 (1½), 101 (1½)  
 MICR 200 (3)  
 PHYS 102 (3)  
 STAT 255 (1½)

**Social Sciences**

ANTH 100A (1½), 100B (1½)  
 ECON 201 (1½), 202 (1½)  
 GEOG 101A (1½)  
 GEOG 101B (1½), 214 (1½), 215 (1½)  
 POLI 100 (3), 250 (1½)  
 SOCI 100 (1½)

**Humanities**

CLAS 100 (3)  
 ENGL 115 (1½), 121 (1½), 215 (1½), 225 (1½)  
 HIST 105 (3), 260 (1½)  
 PHIL 100 (3), 220 (1½), 232 (1½)  
 WS 200A (1½), 200B (1½)

(b) 4½ units of upper level core course requirements to be taken in the third and fourth years as follows:

ES 300A (1½)  
 3 units selected from ES 310 (BIOL 330) (1½), ES 312 (ECON 330) (1½), ES 314 (PHIL 333) (1½), and ES 316 (GEOG 350A) (1½).

(c) 4½ additional units of third and fourth year Environmental Studies courses, chosen from ES 300B, 350, 351, 400A-D, 410, 412, 414, 416, 418, 420, 422, 424, 450. The courses not selected in (b) above may also be chosen.

**MINOR**

Completion of the general program as well as the requirements for another Major or Honours program in the Faculty of Arts and Science is required to obtain the Minor designation in Environmental Studies.

By completing the general program in Environmental Studies, and the requirements for a degree in another faculty, a student may obtain a Minor. See Interfaculty Minor (page 43).

None of the courses chosen in (b) and (c) will be used toward the Environmental Studies Minor if they are declared as part of the outside Major or Honours requirements.



**Note:** Students who have registered in one of the options of the Environmental Studies Program described in a previous calendar will be allowed to complete that option if they so wish. Alternatively they may wish to modify their program as described above in order to receive the Major or Minor designation.

## COURSES

(Course offering codes: Y=Sept.-Apr., F=Sept.-Dec., S=Jan.-Apr., K=May-Aug., NO=Not offered, this session.)

### ES 300A (formerly part of 300) (1½) ENVIRONMENTAL PERSPECTIVES

An examination of a number of persistent themes and dilemmas underlying selected environmental issues of current interest. In order to develop an historical and cultural perspective of nature, attention will be given to the influence of western culture on the human/environment relationship including competing values, political institutions and world views. This course will be conducted as a seminar and will include a term project and a field trip for which a fee will be charged. (Enrollment limited) (*Prerequisite:* third year standing or permission of the Director) FSK(3-0)

### ES 300B (formerly part of 300) (1½) ENVIRONMENTAL ISSUES

An in depth systematic examination of specific environmental areas through seminars and projects; the development of appropriate responses to questions and problems within the selected areas; modes of interaction and communication with professional and community groups; application of theory to practice; qualitative vs. quantitative research methods. This course will be conducted as a seminar and will include a field trip for which a fee will be charged. (Enrollment limited.) (*Prerequisite:* 300A or permission of the Director) FS(3-0)

### ES 310 (BIOL 330) (1½) ECOLOGICAL METHODS

An introduction to experimental and statistical ecology, including principles of experimental design and sampling methods and data analysis. (*Prerequisites:* BIOL 215, STAT 255 or 260. Note: Environmental Studies major students wishing to take ES 310 (BIOL 330) should take STAT 255 or 260 as part of their quantitative concepts and methods requirements prior to taking this course) NO

### ES 312 (ECON 330) (1½) ENVIRONMENTAL ECONOMICS

Economic principles as applied to environmental questions associated with B.C. resource exploitation. The problem of spillovers to economic processes. Externalities and their management through economic institutions. Economic aspects of the use and conservation of the environment, particularly regarding energy, forestry, fisheries, mining, air and water. Problem of sustainable production, conservation, and possible limits to economic growth arising from scarcity of environmental resources. (*Prerequisite:* 201 or permission of the Department) (Not open to students with credit in ECON 430, 430A or 430B) FS(3-0)

### ES 314 (PHIL 333) (1½) PHILOSOPHY AND THE ENVIRONMENT

A philosophical investigation of the moral and conceptual dimensions of environmental problems. Different philosophies of the relation between humans and nature will be compared. Some of the topics to be examined are: human wants and human satisfactions; nature and spiritual values; community; human obligations to other animals; defining quality of life. (*Prerequisite:* third or fourth year standing, or permission of the instructor) F(3-0)

### ES 316 (GEOG 350A) (1½) GEOGRAPHY OF RESOURCE MANAGEMENT

Introduces the philosophical, conceptual, and technical foundations of resource management and conservation. Discussion and critiques focus on ecology, economics, and political/legal aspects of resources. Through these topics the course provides an appreciation of the role of geography in resource management. (*Prerequisites:* 300A or GEOG 214, GEOG 101A/B) FS(3-0)

### ES 350 (1½) FIELD STUDY

Supervised research or organized projects related to environmental problems, supplemented by directed individual study. A formal report is required. (May be repeated once for credit) (*Prerequisite:* 300A and permission of the Director) FSK

### ES 351 (1½) WORKSHOP IN ENVIRONMENTAL METHODOLOGY

The course will explore methodology employed in the evaluation of environmental issues including background research, approaches to the public process and analysis of model studies. In consultation with the instructor, students select an environmental theme for detailed investigation. Critique of student seminar presentations based on individual research papers is undertaken. (*Prerequisite:* 300A or permission of the Director) NO

### ES 400A-D (1½ each) TOPICS IN ENVIRONMENTAL STUDIES

The topics covered in this course illustrate issues and methods of environmental studies through consideration of representative problems. Possible topics include: land impact assessment; scientific measures of environmental quality; social evaluation of environmental stress; advanced questions of natural resource or urban environmental management, environmental law. (May be repeated in different topics to a maximum of 6 units) (*Prerequisite:* 300A or permission of the Director) S(3-0)

### ES 410 (1½) ENVIRONMENTAL IMPACT ASSESSMENT

An introduction to the objectives, philosophy, concepts, methods and social implications of environmental impact assessment (E.I.A.). A critical examination of E.I.A. as an analytical tool in the context of resource management and public policy is undertaken. (*Prerequisite:* 300A or permission of Director) (Not open to students with credit in 400A prior to 1989-90) FSK(3-0)

### ES 412 (1½) CANADA IN TRANSITION: ECOLOGICAL CHALLENGE AND SOCIETAL RESPONSE

A longer range approach to Canadian policy making must take into account the interdependence and continuous interaction of societal and ecological factors. A major purpose of this course will be to identify environmental and institutional problem areas likely to challenge Canadian society during the 1990s and into the next century, and to analyze their implications for public actions. (*Prerequisite:* 300A or permission of the Director) (Not open to students with credit in 400C prior to 1989-90) F(3-0)

### ES 414 (1½) SYSTEMS THEORY: AN INTRODUCTION TO NATURAL AND SOCIAL SYSTEMS

The purpose of this course is to enable each participant to grasp the fundamental principles of systems theory, and to provide a foundation for further exploration and application of systems concepts. The course will examine concepts such as cybernetics, holism, boundaries, negative and positive feedback, self-organization, and transformation. Students will learn to apply these principles to both natural and social systems. This course will be taught as a seminar. (*Prerequisite:* 300A or permission of Director) (Not open to students with credit in 400D prior to 1989-90) NO

### ES 416 (1½) ETHNOBOTANY: ABORIGINAL PEOPLES AND THE PLANT WORLD

An introduction to the relationship between plants and Aboriginal Peoples with a focus on northwestern North America. Use of plants as foods, materials and medicines, plant nomenclature and folk classification, and the role of plants in religion and mythology are topics covered. There will be one or more field trips. (*Prerequisite:* 300A or permission of the Director) F(3-0)

### ES 418 (1½) ENVIRONMENTAL LAW: POLICY AND LEGISLATION

Examination of legal procedures including traditional common law remedies and promising new legislative innovations, consideration of the expression of public values and environmental policies, and government decision making processes. (*Prerequisite:* 300A or permission of the instructor) (Not open to students with credit in 400D, 1990-92) F(3-0)



**ES 420 (1½) GLOBAL ISSUES IN SUSTAINABILITY**

Concepts of sustainability, development and security and their global dimensions; global environmental threats and their sociopolitical implications. Sustainability and development strategies in a north-south context; the role of international agencies in development; global issues of population, energy and resources; international regimes for environmental conservation; war and environment. (*Prerequisite:* 300A or permission of the Director) (Not open to students with credit in 400A from 1989-94) F(3-0)

**ES 422 (1½) WOMEN AND ENVIRONMENTS**

An exploration of the developing interactions between feminism and environmentalism. Topics to be covered include the construction of relationships between women and nature, ecofeminism, women and sustainable development, and women's historical and contemporary environmental activism. (*Prerequisite:* 300A or permission of the Director) (Not open to students with credit in ES 400A, 1994-95) S(3-0)

**ES 424 (1½) DISCOURSES OF ENVIRONMENTALISM**

A seminar examining classic works and persistent themes in North American environmental thought. A study of primary source material and texts by writers such as Thoreau, Austin, Muir, Pinchot, Leopold,

Carson, Ellul, Schumacher, Berry, and Shiva. (*Prerequisite:* 300A or permission of the Director) (Not open to students with credit in ES 400D, 1993-95) NO(3-0)

**ES 450 (LAW 328) (1½) SEMINAR IN ENVIRONMENTAL LAW AND POLICY**

Examination of a selected theme in environmental law and policy. Individual research, presentation, and contribution to a collected work based on the theme. (*Prerequisites:* 418 or LAW 329. Environmental Studies students require permission of the Director; Law students should consult with the instructor prior to enrollment) (Open to students with at least fourth year standing, and students in the Faculty of Law) F(3-0)

**ES 490 (1½-3) DIRECTED STUDIES**

Individual studies on approved environmental topics undertaken by students in consultation with faculty members. Projects will be supervised by one or more faculty members designated by the Director. (Restricted to Environmental Studies students) (*Prerequisite:* 300A; fourth year standing with a grade point average of at least 4.50, and permission of the Director)

## FILM STUDIES

**PROGRAM IN FILM STUDIES**

The Division of Humanities and the Faculty of Fine Arts jointly offer a General Program in Film Studies. This program leads to the B.A. degree (see General Program, page 43). Students may obtain a Minor by completing the requirements for the General Program together with a Major or Honours program in another department of faculty (see Minor and Interfaculty Minor, page 43). These programs lead to either a B.A. or a B.Sc. degree. Priority for admission to courses in Film Studies will go to students registered in the Film Studies Program or majoring in one of the departments offering a course or courses in the Program. Students in this program are required to take the 3-unit, History in Art 295, Introduction to Film Studies, plus nine units of courses selected from the list below.

|         |      |      |                                |
|---------|------|------|--------------------------------|
| English | 413  | (1½) | Studies in Film and Literature |
|         | 414  | (1½) | American Film                  |
|         | 415  | (1½) | Special Studies in Film        |
| French  | 389A | (1½) | French Cinema                  |
|         | 389B | (1½) | Quebec Cinema                  |
|         | 389C | (1½) | Special Studies in Cinema      |
| German  | 433  | (1½) | The German Novel and Film      |
|         | 439  | (1½) | The New German Cinema          |

|                |      |      |   |
|----------------|------|------|---|
| History        | 389A |      | Cinema and European Society, 1900-45                |
| History in Art | 311  | (1½) | Women and Television                                |
|                | 312  | (1½) | Women and Film                                      |
|                | 363  | (1½) | The Cinema and Modern Art Movements                 |
|                | 364  | (1½) | Documentary Film                                    |
|                | 365  | (1½) | Experimental and Art Film                           |
|                | 366  | (1½) | Introduction to History in Cinema                   |
|                | 367  | (1½) | History in Cinema                                   |
|                | 467  | (3)  | Representing Differences: Selves and Others in Film |
|                | 478  | (1½) | Popular Culture Theory and Criticism                |
|                | 485  | (1½) | Italian Film  |
| Italian        | 485  | (1½) | Italian Film  |
| Spanish        | 485  | (1½) | Spanish Film  |
| Russian        | 304  | (1½) | Literature and Cinema in the U.S.S.R.               |
| Writing        | 312  | (1½) | Structure in Cinema and Television Drama            |
|                | 412  | (1½) | Recurrent Themes in Film                            |

## DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE

Barrington F. Beardsmore, B.A. (Liv.), M.A. (McM.), Ph.D. (Brit. Col.), Associate Professor and Chair of the Department  
 Elaine Limbrick, B.A. (Lond.), D. de IIIe cycle (Poitiers), Professor  
 Danielle Thaler, B.A. (Montr.), M.A., Ph.D., (Tor.), Professor  
 Jennifer R. Waelti-Walters, B.A. (Lond.), L. ès L. (Lille), Ph.D. (Lond.), Professor  
 John C.E. Greene, B.A., M.A. (Alta.), D. de l'Univ. (Gren.), Associate Professor  
 Yvonne Hsieh, B.A. (Brit. Col.), M.A., Ph.D. (Stan.), Associate Professor  
 Marc Lapprand, B.A., M.A., Ph.D. (Tor.), Associate Professor  
 Claire Carlin, B.A. (San Diego St.), M.A., Ph.D. (Calif.-Santa Barb.), Assistant Professor  
 Emmanuel Hérique, M.A., D. de IIIe cycle (Nancy), Assistant Professor  
 Sada Niang, M.A. (Tor.), Ph.D. (York), Assistant Professor

Mary Ellen Ross, B.A. (Dal.), M.A. (Paris, Sorb.), Ph.D. (Tor.), Assistant Professor  
 Derek J. Turton, B.A. (Leeds), Cert. Ed. (Nott.), M. Phil. (Leeds), Assistant Professor  
 Marie Vautier, B.A. (Ott.), M.A. (Laval), Ph.D. (Tor.), Assistant Professor  
 Lucie Daigle, B.A. (Laval), M.A. (U. of Vic.), Senior Instructor  
 Jean-Paul Mas, Baccalauréat en Philosophie (Caen), M.A. (Louisiana State), Senior Instructor

**Visiting, Adjunct and Cross-listed Appointments:**  
 Geoffrey Mills, B.Ed., Ph.D. (Brit. Col.), Visiting Assistant Professor (1994-95)

**GRADUATE PROGRAM**

For information on studies leading to the M.A. degree, see page 332.



## GENERAL, MAJOR AND HONOURS PROGRAMS

Students interested in pursuing a program in French should consult with a Department adviser as early as possible.

### First and Second Years

(N.B. Most students with French 12 will begin in 181; consult Department about placement when you first enrol.)

### General and Major Programs

- i) 286, 287
- ii) A grade of B+ or higher in 190, or a grade of C+ or higher in 292.

### Honours Program

- i) 220, 286, 287
  - ii) A grade of B+ or higher in 190, or a grade of B or higher in 292
- All the above must be completed with an average G.P.A. of 6.00 before admission into the Honours Program
- iii) Latin 100.
- (N.B. Francophone students: Please see "Advice to Francophone students" below.)

### Third and Fourth Years

#### General Program

302 and 6 units of courses numbered 350 and above

#### Major Program

- 302
- 402 or 426 (Students enrolled in the Arts Cooperative Education Program are advised to consult the Department)
- 1½ units from the following: 440, 441, 446A, 446B, 448, 449, 450A, 450B, 451, 452, 455B
- 1½ units from the following: 446C, 446D, 446E, 460, 462A, 462B, 462C, 463, 466, 470, 477, 480, 482, 484, 485, 487, 488A, 488C, 488D, 488F, 488H
- 6 other units numbered 350 and above

### Honours Program

- 302, 390, 402, 499 and 12 additional units numbered above 400, including at least one course from each of the following groups:
- i) 420, 425, 426
- ii) 440, 446A, 448
- iii) 446B, 449, 450A, 450B, 451, 452, 455B
- iv) 446C, 446D, 446E, 460, 462A, 462B, 462C, 466, 470, 477
- v) 480, 482, 484, 485

An Honours program in French normally requires a total of 63 units. Admission to the Third Year Honours program requires the approval of the Chair of the Department and the programs of Honours students are subject to the approval of the Honours Adviser. Admission to the Fourth Year Honours Tutorial (499) requires a grade of B or better in 390.

### Class of Honours degrees

First and Second Class Honours degrees may be awarded. To obtain a First Class Honours degree a student must achieve: (1) a graduating average of at least 6.50; (2) a grade point average of at least 6.50 in those departmental courses at the 300 and 400 level that are required for the degree program; and (3) a grade point average of at least 5.50 in French 390 and 499. To obtain a Second Class Honours degree, a student must achieve: (1) a graduating average of at least 3.50; (2) a grade point average of at least 3.50 in those departmental courses at the 300 and 400 level that are required for the degree program; and (3) a grade point average of at least 2.50 in French 390 and 499.

A student who fails to meet departmental requirements for first class standing in the Honours program but has a first class graduating average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet departmental requirements for second class standing but has a second class graduating average will be awarded a Second Class Major degree.

Students wishing to pursue a Double Honours degree which includes Honours in French are reminded that they will have to satisfy the above-mentioned Honours degree class requirements in French.

## COMBINED MAJOR IN ENGLISH AND FRENCH (CANADIAN LITERATURE)

The Combined Major in English and French (Canadian Literature) is not a double major in English and French, but a single B.A. degree program composed of selected courses from each department. The term

"Canadian Literature" will be formally recognized on the transcript. Students should consult either department about choice of courses.

### First year

Two of ENGL 115, 116, 121, 122, 150, 151;  
FREN 181 and 182, or 190 if necessary (consult French Department about placement); HIST 130 (may be taken in a later year);  
Electives

### Second year

One of ENGL 200, 201, 202, 203;  
FREN 286, 287 AND a grade of B+ or higher in 190 OR a grade of C+ or higher in 292;  
Electives  
(N.B.: ENGL 200 is not open to students with credit in 150 or 151. Such students may, with the permission of the Department of English, substitute for 200 3 units of upper-level English courses.)

### Third and Fourth Years

FREN 302 and 3 units of French courses numbered 350 to 477;  
7½ units of courses selected from English Major Course Structure, b) through e), page 76;  
FREN 487 (ENGL 458);  
10½ units selected from the following, of which at least 4½ must be taken in each department; ENGL 448, 450, 451, 452, 453, 457, 459, FREN 480, 482, 484, 485, 488D, 488H;  
4½ units of electives

## UNDERGRADUATE COURSES

Permission is required for entry to all first-year courses to ensure all students are counselled. Students entering University of Victoria courses at higher levels are urged to consult the Department about placement. Placement testing is available and encouraged for all students. Normal entry levels are given below:

- 100—beginners and students with very little knowledge of French;
- 160—Grade 11, one year of college French, or 100;
- 165—French 12, or two years of college French with a grade of C or lower, or taken several years previously;
- 181—French 12, or two years of college French, or 160 or 165;
- 182—181, or French 12, or two years of college French with first-class grades;
- 190—High School French Immersion graduates, or other students who have considerable oral fluency;
- 202—181 with a grade of B+, or 182, or High School French Immersion graduates, or other students who have considerable oral fluency;
- 291—180 or 182, or International Baccalaureate or Advanced Placement;
- 292—291 or special cases;
- 302 or 402—among new students, Francophone students or special cases only.

The Department does not grant course challenges.

No student may obtain credit, including transfer credit, for more than nine units of French at the first year level; no student with French 12 may obtain credit for more than six units of French at the first year level.

*Students wishing to take French 425 are advised that some knowledge of Latin is recommended, although not required.*

*Students wishing to take senior language courses are strongly advised to take 220 in their second year.*

### Advice to Francophone students

Francophone students may not obtain credit for 100, 160, 165, 181, 182, 220, 291, 292, 300 or 350. They should consult the Department about placement; language studies may begin with 190, 302 or 402; literature studies may begin with 286 and 287, or courses numbered 390 and above. Students who hold a D.E.C. from a Francophone CEGEP, a French *baccalauréat* or equivalent are considered to have the equivalent of 286 and 287. A Francophone is defined in this context as a person who has spoken French since childhood and who has received sufficient secondary instruction in French to be literate in French.

### Arts Cooperative Education Program

Students completing first year and choosing French as a major may be interested in exploring the Arts Cooperative option. Please see page 49 for details regarding program requirements and options.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)



**BASIC COURSES**

Intended for students with no more than French 11 or equivalent. Not open to Francophone students.

**FREN 100 (3) BEGINNERS' FRENCH**

An intensive introduction to spoken and written French. Students from this course who are interested in further studies in French will proceed to 160. Laboratory attendance is obligatory. (*Prerequisite:* Written permission of the Department) Y(3-2)

**FREN 160 (3) ELEMENTARY FRENCH LANGUAGE**

Instruction in written and oral use of the French language. Regular oral practice and short written assignments will be required. Laboratory attendance is obligatory. (*Prerequisite:* French 11 or FREN 100) (Note: Not normally open to those who have completed French 12) (Not open to students with credit in 165) Y(3-2)

**FREN 300 (3) FRENCH READING COURSE**

Presentation of basic sentence structures and vocabulary, and reading of texts in order to prepare students to acquire a reasonable reading comprehension of scientific and scholarly works in French. Primarily intended for students who have little or no knowledge of French and are enrolled in university departments requiring a reading knowledge of a second language. (Limited normally to students in third or fourth year or in graduate studies. Not open to students who have completed 181 or higher language courses) (Grading: Com, N, F) (3-0)

**INTERMEDIATE COURSES**

Intended for students with Grade 12 French (except graduates of High School Immersion programs), 160 or equivalent. Not open to Francophone students.

**FREN 165 (1½) INTENSIVE REVIEW OF BASIC FRENCH**

For students whose background in French is beyond the French 11 level, but who require further study before entering 181. Review of basic grammar and vocabulary; oral and written comprehension. Frequent short tests and assignments. Laboratory attendance is obligatory. (*Prerequisites:* French 12 and permission of the Department) (Not open to students with credit in 160) F(3-2)

**FREN 181 (1½) (formerly half of 180) FRENCH LANGUAGE AND LITERATURE (A)**

Study of short texts in French. Grammar, composition, written comprehension exercises. Introduction to phonetics. The obligatory practice hour offers a choice of oral or writing activities. (*Prerequisite:* French 12 or 160 or 165) (Not open to students who have graduated from the high school French Immersion programs — see 190) FS(3-1)

**FREN 182 (1½) (formerly half of 180) FRENCH LANGUAGE AND LITERATURE (B)**

Study of texts in French of intermediate length. Grammar, composition, written comprehension. Phonetic practice. The obligatory practice hour offers a choice of oral or writing activities. (*Prerequisite:* 181 or permission of the Department) (Not open to students who have graduated from the high school French Immersion programs — see 190) FS(3-1)

**ADVANCED INTERMEDIATE COURSES**

Intended for students with 180 or 182, and for High School Immersion, International Baccalaureate and Advanced Placement students.

**FREN 190 (3) LANGUAGE AND LITERATURE FOR IMMERSION STUDENTS**

Intended for students who have completed the High School French Immersion program, this course provides practice in writing skills, an introduction to translation and a study of literature of the Francophone world. Y(3-1)

**FREN 202 (1½) FRENCH GRAMMAR**

A systematic survey of French grammar (morphology and syntax). Frequent exercises and tests. (*Prerequisite:* 181 with a grade of B+, or 182. Also open to graduates of school immersion programs, and to Francophones who wish to improve their knowledge of the written language) (Not open to students registered in 302 or higher) F(3-0)

**FREN 220 (formerly 320) (1½) FRENCH PHONETICS**

The theory and practice of French pronunciation, corrective phonetics, phonetic transcription, intonation, accentuation, syllabification, elision and liaison; training in reading aloud. Individual practice in the Language Centre will be assigned. (*Prerequisite:* 181 or equivalent) (Enrollment limited) FS(3-1)

**FREN 286 (1½) (formerly half of 285) AN INTRODUCTION TO FRENCH LITERATURE BEFORE 1800**

A study of a number of important texts in French literature from the late Middle Ages to the French Revolution. Essays will be assigned, and there will be a final written examination. (*Prerequisite:* A grade of C+ or higher in 180 or 182 or permission of the Department) FS(3-0)

**FREN 287 (1½) (formerly half of 285) AN INTRODUCTION TO FRENCH LITERATURE SINCE 1800**

A study of a number of important texts in French literature from the French Revolution to the contemporary period. Essays will be assigned, and there will be a final written examination. (*Prerequisite:* A grade of C+ or higher in 180 or 182 or permission of the Department) FS(3-0)

**FREN 291 (1½) (formerly half of 290) FRENCH ORAL AND WRITTEN PRACTICE (A)**

Short texts from Canada and France. Grammar, composition, text commentary, précis-writing, literary tenses. Introduction to translation problems. The obligatory practice hour offers a choice of oral or writing activities. (*Prerequisite:* a grade of C+ or higher in 180 or 182 OR International Baccalaureate OR Advanced Placement) FS(3-1)

**FREN 292 (1½) (formerly half of 290) FRENCH ORAL AND WRITTEN PRACTICE (B)**

Varied texts from France and Canada. Grammar, composition, text commentary, précis-writing, translation practice. The obligatory practice hour offers a choice of oral or writing activities. (*Prerequisite:* a grade of C+ or higher in 291) S(3-1)

**FREN 301 (1½ or 3) LITERATURE STUDIES AS AN ELECTIVE**

This course permits students to take French literature courses as electives; it cannot be applied to a General, Major or Honours degree in French. Students registered in this course will, with the permission of the instructor, follow one of the regular session literature courses in French. Readings, lectures and discussions will be in French, but written assignments and examinations may be submitted in English. (May be repeated with different content up to a normal maximum of 3 units. A student who has taken a French literature course as 301 may not repeat it under its regular number for credit. Registration by pro forma.) (3-0)

**ADVANCED COURSES**

A grade of B+ or higher in 190 or a grade of C+ or higher in 292 is prerequisite to all courses numbered 302 and higher, except 389 when it is not counted toward a Major or General program in French. 286 and 287 are prerequisite to all courses numbered 390 and higher, and are pre- or co-requisite to 302 and 350 (Not applicable to Elementary Education students enrolled in the French Language Education Program). Some courses have other prerequisites in addition to these. With departmental permission, Francophone students and special cases may be placed at the third or fourth year level without completing these prerequisites.

**ADVANCED LANGUAGE COURSES****FREN 302 (3) COMPOSITION, TRANSLATION AND STYLISTICS**

This course, conducted entirely in French, will require frequent written exercises, involving vocabulary and grammar; translation, stylistic commentaries; compositions. (*Prerequisite:* A grade of C+ or higher in 290 or 292, or permission of the department) Y(3-0)

**FREN 350 (1½ or 3) ADVANCED ORAL FRENCH**

A practical course designed to increase oral proficiency in French and to develop comprehension of oral and written French. (May be repeated to a maximum of 3.0 units; only 1½ units may be applied to a degree in French; 1½ units are required for a concentration in French at the Faculty of Education) (Enrollment limited) FS(4-0-2)



**FREN 402 (3) AN ADVANCED LANGUAGE COURSE IN MODERN FRENCH USAGE**

A continuation of 302. Written and oral expression through composition, textual analysis, translation and oral presentations, with attention paid to both literary and informal usage. (*Prerequisite*: 302 or equivalent) Y(3-0)

**FREN 420 (1½) ADVANCED FRENCH PHONETICS AND PRONUNCIATION**

A continuation of 220, with advanced work in corrective phonetics, transcription, intonation and liaison. Also: regional and foreign accents, French phonology, combinatory phonetics (coarticulation). May include the use of sound spectrograms and other instrumental readings. Oral practice, including spoken vs. literary styles, high speed reading, pronunciation of difficult and foreign words. (*Prerequisite*: 220 or equivalent) (Enrollment limited) (Students interested in general phonetics and phonology should consult the Department of Linguistics) S(3-0)

**FREN 425 (3) HISTORY OF THE LANGUAGE**

A study of the development of the language from earliest to modern times. Some knowledge of Latin is recommended, although not required. (*Prerequisite*: 220 or equivalent) Y(3-0)

**FREN 426 (3) TRANSLATION**

A comparative study of the characteristics of French and English expression and how they pertain to the problems of translation; practice in translation from English to French and from French to English. (*Prerequisites*: a grade of B or better in 302, and 1½ units of first year English) Y(3-0)

**ADVANCED LITERATURE COURSES****FREN 389 (formerly 489) (1½) CINEMA**

Offered in English. All courses may count toward a Minor in Film Studies. All may be taken as electives. One may count toward a program in French with the following restrictions: all assignments and examinations must be written in French; no more than 1½ units from 389 and 488 may be counted toward a General program; nor may more than 3 units of 389 and 488 combined be counted toward a Major program; only one of 389, 441, 463 and 487 may be counted. Students must have a grade of B+ or higher in 190 or C+ or higher in 292. When 389 is not counted toward a program in French, students must submit all written assignments in English. (*Prerequisite*: third year standing or HA 295) (2-2)

**389A French Cinema**

From the start of the "talkies" to the Nouvelle Vague (1930-60); history of French cinema, major directors, French society as reflected in film. NO(2-2)

**389B Quebec Cinema**

The beginnings of Quebec cinema; foremost directors; current tendencies. (Not open to students with credit in 481, 483, or 488J) NO(2-2)

**389C Special Studies in Cinema**

Study of a special topic in the cinema of the Francophone world, as announced annually. NO(2-2)

**FREN 390 (1½) CRITICAL METHODS**

Intended for Honours students but may be taken as an elective by other students. A survey of modern literary theory (1940-1990), and a practical introduction to recent methods of analyzing literary texts. (*Prerequisites*: 286 and 287) F(3-0)

**FREN 440 (1½ or 3) MEDIEVAL LITERATURE**

Study of a number of medieval literary works in the original. Students will learn to read medieval French and acquire some knowledge of the principal literary genres of the period. NO(3-0)

**FREN 441 (MEDI 441) (1½) MEDIEVAL ARTHURIAN ROMANCE**

Origins and evolution of Medieval Arthurian romance through an examination of representative texts. The language of instruction is English. Students enrolled in FREN 441 must submit all written assignments in French; students enrolled in MEDI 441 must submit all written assignments in English. Students may count only one of 441, 389, 463 and 487 towards a Major, Minor or General program in French. S(3-0)

**FREN 446 (1½) FRENCH POETRY****446A Renaissance**

Late Medieval and Renaissance poetry, with particular emphasis on the Pléiade Group. Major writers studied include Villon and Ronsard. (Not open to students with credit in 445) NO(3-0)

**446B 17th Century**

Poetry in the 17th century, including Malherbe, Saint-Amant, Théophile de Viau, Anne de La Vigne, La Fontaine, M.-C.H. de Villedieu, Boileau, and Jeanne-Marie Guyon. Some 18th century poetry may be included. (Not open to students with credit in 445) NO(3-0)

**446C Romanticism**

Poetry of the late 18th and early 19th centuries, with particular emphasis on the Romantic movement. Major writers studied include Hugo, Lamartine, Vigny and Musset. (Not open to students who have credit for 465) F(3-0)

**446D Late 19th Century**

Poetry in France and Belgium from the post-romantic to the Symbolist periods. Introductory survey, followed by detailed studies of Baudelaire and Rimbaud. (Not open to students who have credit for 468) NO(3-0)

**446E 20th Century**

Valéry, Claudel, Apollinaire and other poets of the early 20th century; the Surrealist movement; important writers and trends in recent poetry. (Not open to students who have credit for 468) NO(3-0)

**FREN 448 (1½) RENAISSANCE PROSE**

Magic, laughter and the pursuit of wisdom in selected works of the French Renaissance. An introduction to major themes in Rabelais and Montaigne. NO(3-0)

**FREN 450A (formerly half of 409) (1½) FRENCH LITERATURE AND THOUGHT: THE AGE OF LOUIS XIII AND RICHELIEU**

Drama, poetry, novel and other prose genres of the 17th century prior to 1661 (the beginning of Louis XIV's personal reign). Texts will be selected from the works of Corneille, Descartes, Madeleine de Scudéry, and other female and male authors. F(3-0)

**FREN 450B (formerly half of 409) (1½) FRENCH LITERATURE AND THOUGHT: THE AGE OF LOUIS XIV**

Drama, poetry, novel and other prose genres during the reign of Louis XIV (1661-1715). Texts will include selections from the works of Molière, Racine, Madame de Lafayette, Pascal, and La Rochefoucauld. S(3-0)

**FREN 451 (1½) THE ENLIGHTENMENT**

Principal literary works of the *philosophes* of the 18th century. NO(3-0)

**FREN 452 (1½) THE NOVEL IN THE 17TH AND 18TH CENTURIES**

The development of the novel through a study of major texts, with emphasis on the 18th century. NO(3-0)

**FREN 455B (1½) COMEDY IN THE 17TH AND 18TH CENTURIES**

A literary study of comedy in France in the classical period, with special emphasis on the works of Molière, Marivaux and Beaumarchais. S(3-0)

**FREN 460 (3) THE NOVEL IN THE 19TH CENTURY**

The development of the novel in France during the 19th century, including works by Stendhal, Balzac, Flaubert and Zola. (Not open to students who have credit for 460A or 460B) NO(3-0)

**FREN 462 (1½, formerly 3) THE NOVEL IN THE 20TH CENTURY****462A 1900-1930**

Contrasting themes and issues explored by male and female novelists, and innovative techniques in the novel. (Not open to students with credit in 462) NO(3-0)

**462B 1925-1955**

The influence of surrealism and existentialism in prose writing. (Not open to students with credit in 488A, 1990-1992) F(3-0)

**462C 1950-the present**

The changing face of the novel from *le nouveau roman* to Jeanne Hyvrard and *l'écriture féminine*. (Not open to students with credit in 462) S(3-0)



**FREN 463 (WS 380) (1½) SIMONE DE BEAUVOIR**

An exploration of the complexity of Beauvoir's thought, the variety of her attitudes, the importance and the problematic nature of her feminism. The language of instruction is English. Students enrolled in FREN 463 must read the texts in the original and submit all written assignments in French; students enrolled in WS 380 must submit all written assignments in English. Students may count only one of 463, 389, 441 and 487 towards a Major, Minor or General program in French. (Cross-listed, when offered, with WS 380 – S02 only) NO(3-0)

**FREN 466 (formerly part of 465) (1½) 19TH CENTURY THEATRE**

Melodrama, the Romantic theatre, *vaudeville* and the Naturalist movement in theatre. Writers studied include Hugo, Musset, Dumas fils, Labiche and Becque. Emphasis on theatre as stereotyped representation of ideology. F(3-0)

**FREN 470 (1½, formerly 3) MODERN FRENCH THEATRE**

A study of the developments and changes in the dramatic literature of 20th century France. NO(3-0)

**FREN 477 (1½) AFRICAN AND CARIBBEAN LITERATURE**

A study of major writers (male and female) from Francophone Africa and the Caribbean. Emphasis will be placed on the ideological groundings of the literature and the stylistic strategies of various writers. S(3-0)

**FREN 480 (1½) THE FRENCH-CANADIAN NOVEL FROM THE ORIGINS TO THE MODERN PERIOD**

A survey of the French-Canadian novel with special emphasis on the first half of the 20th century. F(3-0)

**FREN 482 (1½) CONTEMPORARY FRENCH-CANADIAN NOVEL**

The French-Canadian novel in the second half of the 20th century, in particular *la nouvelle écriture* since 1960. NO(3-0)

**FREN 484 (formerly half of 481) (1½) CONTEMPORARY FRENCH-CANADIAN THEATRE**

Study of the characteristic themes and structures of French-Canadian theatre since the Second World War. (Not open to students with credit in 418) NO(3-0)

**FREN 485 (formerly part of 483, 481) (1½) FRENCH-CANADIAN POETRY**

French-Canadian poetry from Emile Nelligan to the present. Emphasis on Alain Grandbois, St-Denis-Garneau, Anne Hébert, Rina Lasnier, Gaston Miron, Roland Giguère, Michel Beaulieu, Nicole Brossard. F(3-0)

**FREN 487 (ENGL 458) (1½) COMPARATIVE STUDIES IN CONTEMPORARY FRENCH AND ENGLISH CANADIAN LITERATURE**

An introduction to the comparative study of contemporary Canadian Literature in both official languages. Classes will be conducted in English; readings and assignments can be done in either language. However, students taking a Combined Major in Canadian Literature must read the texts in the original. Students enrolled in FREN 487 must submit all written assignments in French; students enrolled in ENGL 458 must submit all written assignments in English. Students may count only one of 487, 389, 441 and 463 towards a Major, Minor or General program in French. S(3-0)

**FREN 488 (1½) SPECIAL TOPICS**

Designed for Major and Honours students, this course may be offered as a reading course, a tutorial, or a seminar or a course of lectures (as circumstances warrant). However, the following restrictions apply:

1. General Program in French — a maximum of 1½ units from 389 and 488 may be counted.
2. Major Program in French — a maximum of 3 units of 389 and 488 combined may be counted.

3. Honours Program in French — a maximum of 1½ units of 488 may be counted.

Topics may be selected from the following:

**488A Modern Prose**

Major prose writers of the 19th and 20th centuries. NO(3-0)

**488C Utopias and Science Fiction**

An historical survey of French utopian and anti-utopian writings, and a study of early science fiction in France and Belgium, based on an anthology of short texts, followed by a detailed study of contemporary science fiction — novels, short stories and films — from Quebec and France. NO(3-0)

**488D French-Canadian Literature Outside Quebec**

Literature of French-Canadian minorities in the Maritimes, Ontario and the West, with an emphasis on the period from 1970 to the present. NO(3-0)

**488F Women Writers.** A look at the way Francophone women have described the world. NO(3-0)

**488G Studies in a Major Author or Movement**

Intensive study of an important writer or movement. When offered, topic will be announced. NO(3-0)

**488H Children's Literature**

Examination of the development and diversification of children's literature since the 17th century, in both France and Quebec. (Not open to students with credit in 488B) S(3-0)

**488I Studies in the Culture and Civilization of France, French Canada or la Francophonie**

Occasional offerings dealing with a specific aspect of French-language civilization or culture. NO(3-0)

**FREN 499 (1½) HONOURS GRADUATING ESSAY**

During the final year of the Honours program, students will write a graduating essay in French of approximately 7,500 words (i.e. 30 typed pages, double-spaced) under the direction of a member of the Department, the topic to be approved by the Honours Committee. The essay must conform to acceptable standards of style and format and be submitted before the end of second term classes. An oral examination in French covering the topic of the essay will be conducted by a committee of three persons (normally, the faculty supervisor, the second reader, and the Departmental Honours Advisor). Y

**COURSES FOR TEACHERS**

The courses in this section are open only to teachers who hold a British Columbia teaching certificate.

**Summer French Immersion Program for Public School Teachers**

Courses in the following group are available only as part of an off campus immersion program. Admission based on a placement test given on the first day.

(R = July/August course)

**FREN 133T (1½) INTRODUCTORY ORAL COURSE IN FRENCH (SUMMER IMMERSION PROGRAM)**

A three week immersion course for beginners and near beginners using audio visual methods. Text: *De Vive voix* or *Dialogue Canada*. R(15-15-2)

**FREN 233T (1½) INTERMEDIATE IMMERSION COURSE (SUMMER IMMERSION PROGRAM)**

A three week immersion course for students who have a basic grounding in French. Both oral and written forms are studied, but with an emphasis on oral work. R(15-15-2)

**FREN 333T (1½) ADVANCED IMMERSION COURSE (SUMMER IMMERSION PROGRAM)**

A three week immersion course for students who have a good knowledge of French. Both oral and written forms are studied, but with an emphasis on oral work. R(15-15-2)



## DEPARTMENT OF GEOGRAPHY

- Michael C. R. Edgell, B.A. (Birm.), Conservation Dip. (Lond.), Ph.D. (Birm.), Associate Professor and Chair of the Department
- Philip Dearden, B.A. (Birm.), M.Sc. (Mem.), Ph.D. (U. of Vic.), Professor
- Harold D. Foster, B.Sc., Ph.D. (Lond.), Professor
- David Chuen-Yan Lai, B.A., M.A. (H.K.), Ph.D. (Lond.), Professor
- Stephen C. Lonergan, B.Sc. (Duke), M.A., Ph.D. (Penn.), Professor
- J. Douglas Porteous, B.A., M.A. (Oxon.), Ph.D. (Hull), Professor
- C. Peter Keller, B.A., (Dub.), M.A., Ph.D. (W. Ont.), Associate Professor
- Lawrence D. McCann, B.A. (U. of Vic.), M.A., Ph.D. (Alta.), Associate Professor
- K. Olaf Niemann, B.Sc. (Queen's), M.Sc., Ph.D. (Alta.), Associate Professor
- Daniel J. Smith, B.A., M.A. (Wat.), Ph.D. (Alta.), Associate Professor
- Stanton E. Tuller, B.A. (Ore.), M.A. Ph.D. (Calif., L.A.), Associate Professor
- Colin J.B. Wood, B.A. (Wales), M.A., Ph.D. (McM.), Associate Professor
- David Duffus, B.Sc., M.Sc. (Regina), Ph.D. (U. of Vic.), Assistant Professor
- Mark S. Flaherty, B.E.S. (Wat.), M.A. (Guelph), Ph.D. (McM.), Assistant Professor
- Pamela J. Moss, B.A. (Indiana), M.A. (Brit. Col.), Ph.D. (McM.), Assistant Professor
- Diana Hocking, B.Sc. (Southampton), M.A. (U. of Vic.), Laboratory Instructor
- John H. Newcomb, B.A., M.P.A. (U. of Vic.), Senior Laboratory Instructor
- Ramona Marie Scott, B.A. (Lake.), M.A. (Holy Names Coll.), Cooperative Education Program Assistant
- Richard Sykes, B.Sc. (U. of Vic.), Programmer
- Philip M. Wakefield, B.Sc., M.A. (U. of Vic.), Senior Laboratory Instructor
- June H. Whitmore, B.Sc. (Hull), Cert.Ed. (Lond.), Cooperative Education Coordinator

### Visiting, Adjunct and Cross-listed Appointments:

- Christopher R. Barnes, B.Sc. (Birm.), Ph.D. (Ott.), F.R.S.C., Professor (Earth and Ocean Sciences) (1991-95)
- Leslie T. Foster, B.Sc. (Lond.), M.A., Ph.D. (Tor.), Adjunct Professor (1994-95)
- Peter E. Murphy, B.Sc., Dip.Ed. (Lond. Sch. Econ.), M.A., Ph.D. (Ohio St.), Professor (Business) (1994-97)
- David F. Strong, B.Sc. (Nfld.), M.Sc. (Lehigh), Ph.D. (Edin.), Professor (Earth and Ocean Sciences) (1991-95)
- Eugene D. Hetherington, M.A. (Tor.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1992-95)
- Gail L. Kucera, B.A. (Mich.), M.S. (W. Wash.), Ph.D. (Wash.), Adjunct Assistant Professor (1995-97)
- H. Jack Ruitenbeek, B.Sc., B.A., M.A. (Calg.), Ph.D. (Lond.), Adjunct Associate Professor (1994-96)
- Mark W. Sondheim, B.A. (Antioch), M.A. (Tor.), Ph.D. (Brit. Col.), Adjunct Associate Professor (1992-95)
- Eileen Van der Flier-Keller, B.A. (Dub.), Ph.D. (W. Ont.), Associate Professor (Earth and Ocean Sciences) (1991-95)
- Gary A. Borstad, B.Sc. (Alta.), C4.Océanographie (Paris VI), Ph.D. (McG.), Adjunct Assistant Professor (1993-95)

## GRADUATE PROGRAMS

For information on studies leading to the M.A. and Ph.D. degrees, see page 334.

### LIMITATION OF ENROLLMENT

Students are advised that because of limited facilities and staff it may be necessary to limit enrollment in certain Geography courses.

### GENERAL, MAJOR AND HONOURS PROGRAMS

The Geography Department offers courses leading to the B.A., B.Sc., M.A., M.Sc., and Ph.D. degrees, with a choice of General, Major, and

Honours programs for both bachelor degrees. Attention of undergraduates is directed also to the possibility of combining a Major in Geography with a Minor in Earth Science or with a Major or Minor in Environmental Studies. Information about course combinations suited to specific professional objectives and about graduate programs is available from the Department.

### Registration Requirements:

**ALL Departmental and course prerequisites will be strictly enforced.**

101A and 101B are prerequisites to all 200 level Geography courses. A minimum grade point of 4.0 (B-) must be obtained in each of these courses before students will be permitted to register in second year courses.

202, 211, 213, 214 and 215 are prerequisites to all Geography courses numbered 300 and above. A minimum grade of 3.0 (C+) must be obtained in each of these courses before students will be permitted to register in third and fourth year courses. **Access to 300 and 400 level Geography courses is restricted to students with at least third year standing.**

Transfer students who intend entering the Geography program in their third year and who may not have all the required second year Geography courses should consult with the Department's Undergraduate Adviser.

Any student not considering a degree in geography but wishing to register in a geography course must complete the specific prerequisites for that course. Students who wish to take the prerequisites concurrently must obtain permission in writing from the course instructor or the Departmental Chair.

### Undergraduate Advising:

Students wishing academic counselling should arrange appointments with the Undergraduate Adviser in months other than January and September.

### Department Recommendations:

The Department recommends appropriate first year mathematics or computer science courses for B.A. Major and Honours programs, and considers a second year mathematics course desirable for B.Sc. candidates.

### Departmental Requirements for the B.A. General and Major in Geography:

**General** — 19½ units: ALL first and second year courses totalling 10½ units; and 9 units of courses numbered 300 and above.

**Major** — 25½ units: ALL first and second year courses totalling 10½ units; and 15 units of courses numbered 300 and above, which must include 321 and at least 1½ units from 322, 323, 325 or 328.

### Departmental Requirements for the B.Sc. General and Major in Geography:

**General** — 19½ units: ALL first and second year courses totalling 10½ units; and 9 units of courses numbered 300 and above which must include 321 and 1½ units of 322, 323, 325 or 328; 3 units chosen from 370, 372, 373, 374, 376, 379; 3 units chosen from other 300 or 400 level Geography courses; and 3 additional units of mathematics or computer science.

**Major** — 25½ units: ALL first and second year courses totalling 10½ units; and 15 units of courses numbered 300 and above which must include 321 and 3 units from 322, 323, 325, 328, 422, 425, 426, 428; 4½ units chosen from 370, 372, 373, 374, 376, 379, 471A-D; 6 additional units chosen from 300 and 400 level Geography courses.

B.Sc. Major students also must take:

- 3 units from MATH 100, 101, 102 or 151.
- 1½ units of computer science other than CSC 100.
- An additional 7½ units from the following list or from 300 or 400 level courses that count toward B.Sc. major degrees in the following disciplines, and which must include at least 1½ units from biology, chemistry or physics:



ASTR 120, 200A, 200B  
 BIOC 200, MICR 200  
 BIOL 150A, 150B, 200, 203, 204, 206, 207, 251  
 CHEM 100, 101, 102, 140, 213, 222, 231, 232, 235, 245  
 C SC 105, 110, 112, 115, 200, 225, 250, 275  
 EOS 100, 101, 201, 202, 240  
 MATH 200, 201, 224, 233A, 233B, 233C, 240  
 STAT 255, 256, 260, 261  
 PHYS 102, 103, 112, 120, 125, 210, 214, 215, 216, 220

#### Departmental Requirements for the B.A. and B.Sc. Honours in Geography:

34½ units minimum. Beyond the requirements for the B.A. or the B.Sc. Major, students must take 324, 499, and 4½ additional units in Geography or in other courses numbered 300 and above, chosen in consultation with the Honours Adviser. At the end of the fourth year, an Honours Essay must be submitted and defended in an oral examination.

Students normally apply for entry into the Honours Program at the end of their second year. Entry requirements are: successful completion of the first two years of the program and a G.P.A. of at least 6.00 in all second year courses. Students wishing to enter at the end of their third year must have a G.P.A. of at least 6.00 for all courses taken in their third year, based on a minimum of 12 units of course work for that year.

A G.P.A. of 6.00 in third year is needed to progress to fourth year in the Honours Program. Students who do not achieve this G.P.A. will be required to transfer to the Major Program.

A First Class Honours degree requires a graduating G.P.A. of at least 6.50; a G.P.A. of at least 6.50 in 300 and 400 level geography courses; and at least A- in 499. A Second Class Honours degree requires a graduating G.P.A. of at least 3.50; a G.P.A. of at least 3.50 in 300 and 400 level geography courses; and at least a B- in 499. Students who do not meet these requirements may opt to receive the Major degree.

**Note:** Students registered in a B.A. or B.Sc. General in Geology as described in this calendar prior to 1991, may complete that option by substituting equivalent EOS courses (see page 70) for previous GEOL courses.

### GEOGRAPHY COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Science is described on page 43. Additional general regulations pertaining to Cooperative Education Programs of the University of Victoria are found on page 38.

Entry into the Geography Cooperative Program is restricted to students who intend to declare either an Honours or Major program in Geography. Normally, students will be admitted at the end of their first year or at the beginning or end of their second year. Students may also be admitted directly from high school (Early Admission) with a minimum equivalent qualification of a B average in Geography, Math, English and one other academic subject taken in the B.C. Provincial Government Grade 12 examinations or equivalent. Deadlines for receipt of applications are September 15 or January 15. To enter and remain in the Geography Cooperative Program, students must maintain a B+ average in Geography and a B average overall. Students are also required to complete satisfactorily at least four work terms. A student may withdraw from the program and graduate with the normal Geography B.A. or B.Sc. degree without the Coop designation.

Each work term is recorded on the student's official transcript of academic record (as COM, N, or F). Details of work terms are recorded on the Record of Work Terms which is attached to the Academic Record.

Further information concerning the Geography Cooperative Program may be obtained from the Department.

### UNDERGRADUATE COURSE INDEX 1995

#### First Year

- 101A (1½) Biophysical Systems and the Human Environment  
 101B (1½) An Introduction to Geography

#### Second Year

- (PREREQUISITES — a MINIMUM grade of B- in each of 101A and 101B)  
 202 (1½) Introduction to Geographical Analysis

- 211 (1½) Concepts in Economic Geography  
 213 (1½) Concepts in Physical Geography  
 214 (1½) Global Change and Human Response  
 215 (1½) Concepts in Cultural Geography

#### Third and Fourth Year

(PREREQUISITES — a MINIMUM grade of C+ in ALL second year courses, and THIRD year standing)

#### Geographical Techniques and Methods Courses

- 321 (1½) Introduction to Quantitative Methods in Geography  
 322 (1½) Digital Remote Sensing  
 323 (1½) Cartography  
 324 (1½) Directions in Geography  
 328 (1½) Geographical Information Systems  
 422 (1½) Advanced Topics in Digital Remote Sensing  
 423 (1½) Advanced Cartography  
 425 (1½) Survey Methods and Analysis in Geography  
 426 (1½) Special Topics in Geographic Data Analysis  
 428 (1½) Advanced Topics in Geographic Information Systems  
 490 (1½ or 3) Directed Studies in Geography  
 499 (3) Honours Seminar and Essay

#### Physical Geography

- 325 (1½) Surveying for Physical Geographers  
 370 (1½) Hydrology  
 372 (1½) Physical Climatology  
 373 (1½) Applied Climatology  
 374 (1½) Biogeography  
 376 (1½) Geomorphology  
 377 (1½) Applied Geomorphology  
 379 (1½) Pedology  
 471A (1½) Seminar in Physical Geography — Biogeography  
 471B (1½) Seminar in Physical Geography — Climatology  
 471C (1½) Seminar in Physical Geography — Geomorphology  
 471D (1½) Seminar in Physical Geography — Field Studies

#### The Urban Environment

- 340A (1½) Systems of Cities  
 340B (1½) Internal Structure of Cities  
 342 (1½) Urban Historical Geography  
 343 (1½) Urban Development Processes  
 346 (1½) Geography of Environment and Health  
 378 (1½) Environmental Aesthetics  
 440 (1½) The Canadian City  
 442 (1½) Geography of Chinatowns and Chinese Migration  
 444 (1½) Urban Transportation and Land Use Planning  
 445 (1½) Social Planning and Community Development  
 446 (1½) Development and Planning of the Urban Region  
 447 (1½) Urban Problems of Pacific Rim Developing Countries  
 448 (1½) Urban Social Geography and Planning  
 449 (1½) Women in the City

#### Regional and Development Geography

- 347A (1½) Geography of Economic and Cultural Developments: Developed World  
 347B (1½) A Geography of Third World Development  
 348 (1½) World Political Geography  
 362 (1½) The Making of a Canadian Landscape  
 443 (1½) Geography of Regional Development  
 464A (1½) Physical and Cultural Geography of China  
 464B (1½) Political and Economic Geography of China  
 465 (3) Geography of Japan  
 466 (1½) Regional Studies  
 467 (1½) Geography of Southeast Asia  
 469 (1½) Landscapes of the Heart



**Resource Geography**

|           |  |
|-----------|--|
| 350A (1½) | Geography of Resource Management                                 |
| 350B (1½) | Applied Resource Geography                                       |
| 371 (1½)  | Water Resources Management                                       |
| 375 (1½)  | Forest Resource Management                                       |
| 450A (1½) | Decision Making in Resources Management — Theory                 |
| 450B (1½) | Decision Making in Resources Management — Practical Applications |
| 452 (1½)  | Coastal and Marine Resources I: Policies and Programs            |
| 453 (1½)  | Coastal and Marine Resources II: Practical Applications          |
| 454 (1½)  | Geographical Dimensions of Energy Policy                         |
| 455 (1½)  | Parks and Wilderness   |
| 456 (1½)  | Wildlife Resource Management                                     |
| 472 (1½)  | Disaster Planning  |
| 473 (1½)  | Medical Geography  |

**UNDERGRADUATE COURSES**

*Students should consult the Department concerning courses offered in any particular year.*

In certain courses students may be required to meet part of the expenses involved in required field trips, course supplies or the provision of course manuals. Students will be advised of such expenses during the first week of classes.

For courses carrying A or B designations, A is not a prerequisite of B unless indicated under the course description.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered this session) (The status of courses with no offering codes is uncertain.)

**INTRODUCTORY GEOGRAPHY****FIRST YEAR****GEOG 101A (1½) BIOPHYSICAL SYSTEMS AND THE HUMAN ENVIRONMENT**

An introduction to the functioning of the biosphere, the ways in which humans perceive and alter natural processes, and environmental consequences of these alterations. Topics include energy flows, biogeochemical cycling, ecosystem structure and dynamics; and various aspects of resource management such as agriculture, forestry, fisheries, protected area and endangered species management, and pollution. (Not open to students with credit in E S 101) FS(2-2)

**GEOG 101B (1½) AN INTRODUCTION TO HUMAN GEOGRAPHY**

Perspectives on the scope and purpose of Human Geography, emphasizing approaches, concepts, and scales of geographical analysis. Topics include the social geography of cities, interpretation of cultural landscapes, the urbanization and industrialization of regions, and economic development and social change in the world system. FS(2-2)

**SECOND YEAR**

(Prerequisites — a MINIMUM grade of B- in each of 101A and 101B)

**GEOG 202 (1½) INTRODUCTION TO GEOGRAPHICAL ANALYSIS**

Qualitative and quantitative techniques of geographical analysis. (Students will be charged a laboratory fee) (Prerequisites: 101A or ES 101, and 101B) FSK(3-2)

**GEOG 211 (formerly 201A and 201B) (1½) CONCEPTS IN ECONOMIC GEOGRAPHY**

The major theoretical interpretations and analyses of the spatial characteristics of economies. Topics include locational dynamics of primary, secondary, and tertiary industries; population change; world trade patterns; urban location theory and urban hierarchies; and transportation patterns. (Prerequisites: 101A or ES 101, and 101B) S(2-2)

**GEOG 213 (formerly 203A and 203B) (1½) CONCEPTS IN PHYSICAL GEOGRAPHY**

An introductory description and analysis of characteristics and interactions of the atmosphere, hydrosphere, lithosphere, and biosphere. (Prerequisites: 101A or ES 101, and 101B) F(3-2)

**GEOG 214 (1½) GLOBAL ENVIRONMENTAL CHANGE AND HUMAN RESPONSE**

The changing global environment; causes, effects, and responses. The causes of global change; the present and expected impacts on natural and social systems; and response strategies that have been enacted and proposed will be studied. The course will be based on four components: global environmental change; sustainable development; biodiversity; population impoverishment and environmental degradation. (Prerequisites: 101A or ES 101, and 101B) S(2-2)

**GEOG 215 (formerly 205A and 205B) (1½) CONCEPTS IN CULTURAL GEOGRAPHY**

An investigation of spatial aspects of cultural elements, including ethnicity, religion, language, politics, urban problems, and social organization. Focus on interactions between these elements and the physical and built environments. Objectives are to develop awareness of the spatial aspects of the multiple and diverse ways people live and to investigate the processes through which this diversity is constructed. (Prerequisites: 101A or ES 101, and 101B) F(2-2)

**THIRD AND FOUR YEARS**

(Prerequisites — a MINIMUM grade of C+ in ALL second year courses, and THIRD year standing)

**GEOGRAPHICAL TECHNIQUES AND METHODS****GEOG 321 (1½) INTRODUCTION TO QUANTITATIVE METHODS IN GEOGRAPHY**

Application of statistical techniques to geographic problems. Topics include hypothesis formulation, sampling strategies, parametric and nonparametric statistical tests, statistical modes. All laboratory exercises are computer based. (See Credit Limit, page 18) (Prerequisite: 202, may be taken concurrently with permission of the Department, 1½ units of computer science) FS(3-2)

**GEOG 322 (1½) DIGITAL REMOTE SENSING**

An introduction to the processing and analysis of digital remotely sensed data. Data from various sources will be discussed and analyzed with respect to their applicability in geographical sciences. Laboratory assignments will use image analysis software in a variety of applications. (Prerequisites: 202, may be taken concurrently with permission of the Department; 1½ units of computer science) (Students will be charged a laboratory fee) SK(2-3)

**GEOG 323 (1½) CARTOGRAPHY**

An introductory course in topographic and thematic cartography. Emphasis on cartographic data manipulation, generalization, and symbolization; map design, visualization, and communication. Laboratory assignments will provide practical experience in designing and drafting maps. Students will be charged a laboratory fee. (Prerequisites: 202, may be taken concurrently with permission of the Department, 1½ units of computer science) F(2-3)

**GEOG 324 (1½) DIRECTIONS IN GEOGRAPHY**

Course will outline and discuss the development of geographical thinking and knowledge, but will concentrate upon trends and controversies in geography in the 20th century. Will enable students to relate other courses to the many facets of geography. Areas covered will include: geography's relationships to other disciplines; the scope of geography; human relationships to nature as a geographical theme; the idiographic versus nomothetic content of geography; practical application of geography; recent 'revolutions' in the discipline. (Prerequisites: six units of 200 level Geography) S(3-0)



**GEOG 328 (1½) GEOGRAPHIC INFORMATION SYSTEMS**

The theory and principles of geographic information systems (GIS). Focuses on the design and creation of spatial data inventories, and the manipulation and analysis of spatial data. Laboratory exercises will provide practical experience of GIS use in inventory and spatial analysis. (*Prerequisites*: 202, may be taken concurrently with permission of the Department; 1½ units of computer science) FK(2-3)

**GEOG 422 (1½) ADVANCED TOPICS IN DIGITAL REMOTE SENSING**

This course deals with aspects of remote sensing including processing and classification of digital satellite and airborne data and digital elevation modelling. Emphases will be placed on the processes of interpretation of remotely sensed data, the enhancement of digital data for visual analysis and the integration of remotely sensed data with other spatial data. (*Prerequisites*: 321 and 322) F(2-2)

**GEOG 423 (1½) ADVANCED CARTOGRAPHY**

The growth and evolution of cartography from ancient civilizations to the present. Trends and technological transitions in map production, reproduction, surveying, and navigation are emphasized. Contemporary topics in cartographic research and the industry of cartography. Assignments include independent research and participation in a group project. (*Prerequisites*: 321, 323, and 325) NO(2-2)

**GEOG 425 (1½) SURVEY METHODS AND ANALYSIS IN GEOGRAPHY**

This course will examine various approaches to research design and then focus on the statistical approach. The development of questionnaires and sample frames will be discussed, followed by preliminary analysis of the research data using nonparametric statistical techniques. (*Prerequisite*: 321) F(3-0)

**GEOG 426 (1½) SPECIAL TOPICS IN GEOGRAPHIC DATA ANALYSIS**

Course content will vary with instructor, but will include applications in multivariate analysis of geographic data and/or qualitative approaches to data collection and analysis. (*Prerequisite*: 321) S(2-2)

**GEOG 428 (1½) ADVANCED TOPICS IN GEOGRAPHIC INFORMATION SYSTEMS**

Contemporary research topics in GIS. Topics include pure, applied technical, managerial, and administrative problems in implementing GIS technology. Laboratories will provide practical experience in spatial planning and resolution of land-related conflicts. (*Prerequisites*: 321, 323, 328) S(2-3)

**GEOG 490 (1½ or 3) DIRECTED STUDIES IN GEOGRAPHY**

In special cases, with the consent of the Department and the individual instructor concerned, a student may be permitted to pursue a course of directed studies. Courses of 1½ or 3 units may be arranged, but no student is permitted to take more than three units of directed studies. In order to qualify for a 490 course a student must have at least a 6.00 G.P.A. in the previous fifteen units of University work. FS

**GEOG 499 (3) HONOURS SEMINAR AND ESSAY**

It is recommended that honours students take the honours seminar in their third year. Honours students must register for the honours seminar and essay when admitted to the program. Students who register in their third year will receive a grade of INP until the essay is completed. The essay will be submitted at the end of the fourth year. (Grading: INP; letter grade) Y(3-0)

**PHYSICAL GEOGRAPHY****GEOG 325 (1½) SURVEYING FOR PHYSICAL GEOGRAPHERS**

An introduction to fundamental concepts of surveying and field work. Topics include the use of EDM, theodolites, and transits; introductory photogrammetry; and advanced surveying techniques using Total Station and Global Positioning Systems. Laboratory exercises include the application of different survey techniques to actual problems of measuring landform, hydrologic, or vegetative features, together with methods of sampling, analysis, and evaluation. (*Prerequisites*: 202, may be taken concurrently with permission of the Department; MATH 100, 102 or equivalent) (Students will be charged a laboratory fee) F(2-2)

**GEOG 370 (1½) HYDROLOGY**

A study of hydrology, focusing on the various factors that influence the distribution of water resources in time and space. Among the topics studied are: evaporation and transpiration; runoff and stream gauging; snow and ice surveying; flood prediction and droughts. A term project, generally involving field work, is required. This course provides the background in physical hydrology recommended for students registered for 371. (*Prerequisite*: 213 or 203A) F(2-2)

**GEOG 372 (1½) PHYSICAL CLIMATOLOGY**

An investigation of the physical processes that determine the variation in climate and weather from place to place around the world. Emphasis will be on the process of mutual interaction between the earth's surface and the atmosphere, and the role of differing surface types in creating the climate above them. (*Prerequisite*: 213 or 203B) F(2-2)

**GEOG 373 (1½) APPLIED CLIMATOLOGY**

A study of the application of physical principles to practical problems in climatology and the reciprocal interaction between climate and human activities. Discussion topics will include: urban effects on climate, air pollution, human bioclimatology, agricultural climatology, and methods of microclimatic modification. (*Prerequisite*: 213 or 203B) S(2-2)

**GEOG 374 (1½) BIOGEOGRAPHY**

An analysis of the organization of biotic systems. Origins, dispersals, evolution, and limiting physical, biotic and cultural factors as they relate to present day distribution patterns and ecological relationships will be considered. Particular attention will be paid to: the nature of ecological relationships; the landscape patterns resulting from these relations; the dynamic character of ecosystems; the impact of humans upon ecological processes and ecosystem character. (*Prerequisite*: 213 or 203B; BIOL 150A and 150B recommended) F(2-2)

**GEOG 376 (1½) GEOMORPHOLOGY**

An investigation of the genesis and distribution of landforms with emphasis upon techniques used in the measurement of those processes which are involved in the evolution of glacial, periglacial, temperate and tropical landforms. Marine, karstic and volcanic landforms will also be studied. The course will involve outside readings, field trips, and participation in a group research project. (*Prerequisite*: 213 or 203A) F(2-2)

**GEOG 377 (1½) APPLIED GEOMORPHOLOGY**

A detailed examination of the social relevance of geomorphology, in which three areas receive emphasis. Terrain analysis involves the evaluation of landscapes for mineral resources, trafficability, urban and industrial site suitability and agricultural productivity potential. Terrain stability studies explore the problems involved in maintaining landscape equilibrium in the face of major engineering schemes and waste disposal. Special attention is also paid to risk from natural hazards, especially those of importance in western North America, such as earthquake, tsunamis, avalanches and volcanic eruptions. Outside readings, field trips and participation in a group research project are involved. (*Prerequisite*: 376) S(2-2)

**GEOG 379 (1½) PEDOLOGY**

An examination of soil genesis and distribution and of soil classification systems. Attention will focus on the interplay of biophysical factors and processes that influence soil development, on soil types and characteristics in different pedogenic regimes, and on selected aspects of soil management and conservation. The course will involve field work, basic laboratory analysis, and completion of a research project. (*Prerequisites*: 213 or 203A or 203B) F(2-2)

**GEOG 471 (1½) SEMINAR IN PHYSICAL GEOGRAPHY**

The course offers the opportunity to undertake advanced work in biogeography, climatology, geomorphology and hydrology. One of these areas will be specified for the course each year. Emphasis is on learning through experience, and students will complete suitable research projects in close consultation with the faculty member. (This course may be taken twice only, but no more than once from the same professor for 471A, B, or C.)



|   |         |
|---|---------|
| Topics:   |         |
| 471A Biogeography ( <i>Prerequisite</i> : 374)                    | S(3-0)  |
| 471B Climatology ( <i>Prerequisite</i> : 372 or 373)              | NO(3-0) |
| 471C Geomorphology ( <i>Prerequisite</i> : 376)                   | NO(3-0) |
| 471D Field Studies  |         |
| ( <i>Prerequisite</i> : one third-year physical geography course) | F(3-0)  |

### THE URBAN ENVIRONMENT

#### GEOG 340A (1½) SYSTEMS OF CITIES

The geography of urban systems at regional, national, and global scales of enquiry. Drawing upon Canadian and other world examples, topics considered include the urbanization process; the location and functions of cities; spatial interaction and the integration of urban systems; the growth of cities and the development of urban systems; global cities; and regional planning for systems of cities. (*Prerequisite*: 211 or 201A or 201B) F(3-0)

#### GEOG 340B (formerly 349) (1½) INTERNAL STRUCTURE OF CITIES

This course explores the forces shaping the internal structure of the contemporary city. Topics considered include the land use and spatial structure of cities; building the city; architecture and urban design; patterns of class and ethnicity in the changing city; suburbanization and family life; and planning the post-industrial city. (*Prerequisite*: 211 or 201A or 201B) S(3-0)

#### GEOG 342 (1½) URBAN HISTORICAL GEOGRAPHY

An interpretation of the development of the modern city, emphasizing the forces shaping the Canadian city in the 19th and early-20th centuries. Topics examined include urban-industrial growth; technology, architecture and evolving urban form; immigration and ethnic neighbourhoods; suburbanization of the middle class; and urban reform and planning the industrial city. (*Prerequisites*: 340A and 340B; or permission of instructor) NO(3-0)

#### GEOG 343 (1½) URBAN DEVELOPMENT PROCESSES

An examination of social and economic processes influencing urban development. Goals include: introduction of issues and concepts relevant to the study of regional disparities; examination of political economy frameworks used to explain regional disparities and urban development; and assessment of the strengths and weaknesses of these explanations. Topics covered include gentrification, service provision, labour market segmentation, and industrial change. (*Prerequisites*: 211, or 201A and 201B; and 215, or 205A and 205B) S(3-0)

#### GEOG 346 (1½) GEOGRAPHY OF ENVIRONMENT AND HEALTH

Theories and methods involved in environment and health research from a medical geographical perspective. "Environment" includes urban, social, political, cultural and physical environments. "Health" includes complete social, physical, and emotional well-being. Current issues in environment and health will be placed within a wider social/community context. (*Prerequisites*: 6 units of 200 level Geography) S(3-0)

#### GEOG 378 (1½) ENVIRONMENTAL AESTHETICS

This course derives from the traditional concern of geographers with the appearance, meaning, and value of landscape. Aesthetic satisfactions in natural, rural and built environments are considered. Following discussion of current environmental aesthetic theory, the varying approaches of contemporary practitioners in humanistic and applied geography, architecture, and planning are investigated, and the implications for managing environments are discussed. (*Prerequisites*: 6 units of 200 level Geography) F(3-0)

#### GEOG 440 (1½) THE CANADIAN CITY

A seminar and field work course that examines selected themes for interpreting the geographic character of the Canadian city. (*Prerequisites*: 340A and 340B) F(3-0)

#### GEOG 442 (1½) GEOGRAPHY OF CHINATOWNS AND CHINESE MIGRATION

Seminar on the urban overseas Chinese communities in the Pacific Rim countries. Major topics include migration theory, concepts of culture conflict, assimilation and acculturation, urban ethnicity, home environment of Chinese emigrants, attitudes and policies of host society to-

wards Chinese immigrants and imprints of Chinese culture on the urban landscape of the receiving country. Emphasis will be placed on the Chinese migration to Canada and the study of the urban problems of Canadian Chinatowns. (*Prerequisites*: 211, 201A or 201B; and 215, 205A or 205B) (Not open to students with credit in PACI 442) F(3-0)

#### GEOG 444 (1½) URBAN TRANSPORTATION AND LAND USE PLANNING

The problem of developing a satisfactory transportation system relative to the areal pattern of land use in an urban area is the major concern of this course. The functions of the various modes of transport and their effectiveness in the urban environment are investigated. Land use types are studied as generators of traffic in the city. An attempt is made to determine the volume and nature of traffic generated by different land uses. Consideration is given to the possibilities of drastically altering land use patterns of cities, as well as changing transport systems. (*Prerequisites*: 340A and 340B) NO(3-0)

#### GEOG 445 (formerly 346) (1½) SOCIAL PLANNING AND COMMUNITY DEVELOPMENT

A theoretical grounding and practical experience in social planning and community development. Course materials are organized topically around issues that cities of all sizes face. Objectives are: identification and examination of critical issues shaping Canadian society in the 1990s; application of theoretical concepts in explaining social processes of change to situations in the community; and generation of discussion about the various strategies used in social planning and community development. (*Prerequisites*: GEOG 340A and 340B) F(3-0)

#### GEOG 446 (1½) DEVELOPMENT AND PLANNING OF THE URBAN REGION

Focusing on the urban growth and problems of metropolitan regions in the 20th century, this seminar course examines the development of planning thought, the nature of the planning process, and the role of geography in solving critical and contemporary planning issues. (*Prerequisites*: 340A and 340B) NO(3-0)

#### GEOG 447 (1½) URBAN PROBLEMS OF PACIFIC RIM DEVELOPING COUNTRIES

The course examines the fundamental differences in urban organization between developed and developing countries, and studies the political, cultural and socioeconomic conditions under which cities in Pacific Rim developing countries are growing. (*Prerequisites*: 340A and 340B) (Not open to students with credit in PACI 447) S(3-0)

#### GEOG 448 (1½) URBAN SOCIAL GEOGRAPHY AND PLANNING

A behavioural approach to the study of human-environment systems in an urban context. With bases in cultural geography and environmental psychology, the course will investigate the spatial dynamics of urban behaviour in western societies, with special reference to social interaction, and perceptions, attitudes and learning within the urban system. Students should become aware of the contemporary urban social problems which are involved in planning the metropolitan environment. (*Prerequisites*: 340A and 340B) NO(3-0)

#### GEOG 449 (1½) WOMEN IN THE CITY

An examination of the relationship between socially constructed gender relations and the changing nature and form of the urban environment. Issues include women's impact on or participation in: urban design and form, construction of urban space, and access to social services. (*Prerequisites*: GEOG 340A and 340B or WS 200A and 200B) S(3-0)

### REGIONAL AND DEVELOPMENT GEOGRAPHY

PACI 200A/B is recommended for students intending to take 347B, 463, 464A, 464B, 465.

#### GEOG 347A (formerly half of 347) (1½) GEOGRAPHY OF ECONOMIC AND CULTURAL CHANGE: DEVELOPED WORLD

A systematic treatment of factors effecting change, and a description and evaluation of their impact on cultural landscapes. Topics will include growth, innovation, diffusion, communications, migration and urban/rural disparities. Attention will focus on the dynamics of change in the developed countries of Europe and North America. (*Prerequisites*: 211 or 201A or 201B; and 215 or 205A or 205B) F(3-0)



**GEOG 347B (formerly half of 347) (1½) A GEOGRAPHY OF THIRD WORLD DEVELOPMENT**

Spatial aspects of the processes of modernization and development in Latin America, Africa, and Asia (excluding the U.S.S.R.). Colonial and postcolonial developments are discussed in terms of economic, social, and political geography, and resulting changes in both physical and cultural landscapes. (*Prerequisites:* 211 or 201A or 201B; and 215 or 205A or 205B) S(3-0)

**GEOG 348 (1½) WORLD POLITICAL GEOGRAPHY**

This course examines the ways in which political power at the national and international levels is influenced by the geographical features of the areas in which it operates. Themes include: the geographer's contribution to geopolitics; military geography; propaganda cartography; and the environmental consequences of nuclear war. (*Prerequisites:* 211 or 201A or 201B; and 215 or 205A or 205B) F(3-0)

**GEOG 362 (formerly 361A/B) (1½) THE MAKING OF THE CANADIAN LANDSCAPE**

Canada's geographical identity is interpreted by examining the forces shaping the evolving cultural and economic landscapes of Canada's major regions. (*Prerequisites:* 6 units of 200 level Geography) S(3-0)

**GEOG 443 (1½) GEOGRAPHY OF REGIONAL DEVELOPMENT**

Course will evaluate the changing spatial relationships between the location of resources and population. Discussion of 1) the geographical limits of various political jurisdictions in federal states as opposed to unitary states and the powers vested in various levels of government to implement development plans and 2) the problems of data availability on regional and subregional bases. Social and institutional obstacles to change, regional policies in Canada, and the countries of Western Europe will be discussed and evaluated. (*Prerequisites:* 343; ECON 201 and 202 recommended) S(3-0)

**GEOG 464A (formerly 364) (1½) PHYSICAL AND CULTURAL GEOGRAPHY OF CHINA**

A study of the physical environment of China and the role of the Chinese people in moulding and changing the landscape over the past four thousand years. The subject matter will deal primarily with conditions pertaining to the Chinese earth and the Chinese people in the period up to 1979, and provide an essential basis for appreciation of the transformation of China since 1949. (*Prerequisites:* 6 units of 200 level Geography) F(3-0)

**GEOG 464B (formerly 365) (1½) POLITICAL AND ECONOMIC GEOGRAPHY OF CHINA**

This course consists of two parts. One examines the impacts of Western colonization on the economy of China, the search for new political and economic forms, and the structure of the Communist government, and Two focuses on the economic policies and development of China after 1949, and a geographical study of selected administrative or economic regions. (*Prerequisite:* 464A) S(3-0)

**GEOG 465 (3) GEOGRAPHY OF JAPAN**

A survey of the physical environment, cultural patterns and economy of Japan, which is intended to provide the background which will enable the student to assess Japan's role in the world today. Both traditional patterns and present day changes will be discussed. (*Prerequisites:* 4½ units of 200 level Geography) Y(3-0)

**GEOG 466 (1½) REGIONAL STUDIES**

A study of the geography of a selected region of the world from a systematic perspective. Topics include the physical and human landscape; settlement; economic, political, and social geography; spatial variation in modernization and economic growth. Students are advised to consult the Department for an outline of the regions covered in any year. (May be taken more than once in different topics with permission of the Department) (*Prerequisites:* 4½ units of 200 level Geography) NO(3-0)

**GEOG 467 (formerly 463A and B) (1½) GEOGRAPHY OF SOUTHEAST ASIA**

A systematic geography of the countries of Southeast Asia. Topics include physical and cultural landscapes, regional variations, and problems associated with modernization and underdevelopment, such as settlement, land reform, urbanization and environment. (*Prerequisites:* 4½ units of 200 level Geography) F(3-0)

**GEOG 469 (1½) LANDSCAPES OF THE HEART**

Grounded in humanistic geography and qualitative methods, this course investigates the meaningful non-tangible relationships between human-kind and environment. These relationships include emotional attachment (to place), aesthetics (of landscape), ethics (of environment), and spirituality (sacred space). (*Prerequisites:* 378, or permission of instructor) NO(3-0)

**RESOURCE GEOGRAPHY****GEOG 350A (ES 316) (1½) GEOGRAPHY OF RESOURCE MANAGEMENT**

Introduces the philosophical, conceptual, and technical foundations of resource management and conservation. Discussion and critiques focus on ecology, economics, and political/legal aspects of resources. Through these topics the course provides an appreciation of the role of geography in resource management. (*Prerequisites:* 101A or ES 101, and 101B, and 214 or ES 300A) F(3-0)

**GEOG 350B (1½) APPLIED RESOURCE GEOGRAPHY**

An analysis of contemporary problems and issues of resource management. Case studies will be used to examine such issues as common property exploitation, multiple use, area management and conflict resolution. Particular emphasis will be placed on North American examples. (*Prerequisite:* 350A or ES 316) S(3-0)

**GEOG 371 (1½) WATER RESOURCES MANAGEMENT**

A study of water resources management in different parts of the world, examining the influence of various physical, economic, social, political, and technological factors. The alternative ways in which such problems as water scarcity, floods, and declining water quality are handled will be discussed. A number of major water development schemes will be examined in detail. Students will be expected to undertake a modest research project and report upon it. (*Prerequisite:* 370) F(2-2)

**GEOG 375 (1½) FOREST RESOURCE MANAGEMENT**

An examination of the geographical and ecological parameters of forest systems, and the relationships of these parameters to actual and potential resource use. Major emphasis will be placed on the coastal forest resources of British Columbia, and comparisons drawn with Europe and United States examples. Topics, to be covered in both class and field work, will include forests as functioning ecological and management units, historical development and current changes in management policy and possible trends in future resource policies. (*Prerequisite:* 374) S(2-2)

**GEOG 450A (1½) DECISION MAKING IN RESOURCES MANAGEMENT: THEORY**

An advanced course in the geography of resources management and conservation. Its purposes are to determine the factors which appear to influence decision making in the resources field, and to examine the effects of different decisions upon the physical and human environments. It is devoted to a review of the various approaches to the analysis of resources management decisions and their applicability to a variety of situations. (*Prerequisite:* 350A or ES 316; and 350B) F(3-0)

**GEOG 450B (1½) DECISION MAKING IN RESOURCES MANAGEMENT: PRACTICAL APPLICATIONS**

This course deals with a number of case studies, drawn from different parts of the world, applying theories and techniques developed in 450A, and comparing the impacts on the physical and human landscape. (*Prerequisite:* 450A) S(3-0)



**GEOG 452 (1½) COASTAL AND MARINE RESOURCES I: POLICIES AND PROGRAMS**

This seminar course reviews and critiques marine resource policies and programs that have shaped human relationships with the world oceans and coastlines. Topics include multi- and transjurisdictional management issues, the common property nature of the oceans, biophysical aspects of marine resource management, and human responses to marine issues. *Prerequisite:* 350A (ES 316) and 350B) S(3-0)

**GEOG 453 (1½) COASTAL AND MARINE RESOURCES II: PRACTICAL APPLICATIONS**

A seminar focusing on analysis of selected marine resource management programs, and stressing an understanding of biophysical foundations and social domains of marine resources. Topics include fisheries, marine mammal hunting, ocean mining and drilling, environmental management, coastal land-water interactions, aquaculture, marine parks, and marine transportation. *(Prerequisites:* 350A (ES 316) and 350B; 452 recommended) NO(3-0)

**GEOG 454 (1½) GEOGRAPHICAL DIMENSIONS OF ENERGY POLICY**

An analysis of contemporary problems and issues in energy policy development. Particular attention will be paid to global variations in energy availability and requirements; transportation patterns, and environmental concerns. *(Prerequisites:* 350A or ES 316; and 350B) NO(3-0)

**GEOG 455 (formerly 459A and B) (1½) PARKS AND WILDERNESS**

An investigation of the principles and concepts underlying parks and the designation, planning, and management of other protected areas.

Topics include the philosophy of protected areas, establishment and international classification, and case studies of park and wilderness management problems in British Columbia and elsewhere. Usually involves a three-day field trip for which there will be some charge. *(Prerequisite:* 350A (ES 316)) S(3-0)

**GEOG 456 (1½) WILDLIFE RESOURCE MANAGEMENT**

An examination of conservation policies, programs, and management plans for wild plants and animals. Review biophysical foundations and social aspects of wildlife use, endangerment, range reduction, and extinction, international, national, regional, and local wildlife management initiatives will be examined. *(Prerequisites:* 350A, 374, BIOL 150A recommended or 1½ units of Biology, or permission of the instructor) S(3-0)

**GEOG 472 (1½) DISASTER PLANNING**

A detailed overview of disaster planning, including risk and comprehensive planning, microzonation, design safety, models for disaster prediction, warning systems, disaster plans, reconstruction, and trauma support. The course will involve lectures, seminars, and research projects. *(Prerequisites:* 350A or ES 316; and 350B) F(3-0)

**GEOG 473 (1½) MEDICAL GEOGRAPHY**

The major research themes of medical geography, including the social and environmental contexts of disease, epidemiological data delivery systems, and health and the pollution syndrome. The course will involve lectures, seminars, and research projects. *(Prerequisites:* 6 units of 200 level Geography) S(3-0)

## DEPARTMENT OF GERMANIC STUDIES

Johannes Maczewski, Staatsexamen (Marb.), Ph.D. (McG.), Assistant Professor and Chair of the Department

Michael L. Hadley, C.D., B.A. (Brit. Col.), M.A. (Man.), Ph.D. (Queen's), Professor

Walter E. Riedel, B.Ed., M.A. (Alta.), Ph.D. (McG.), Professor

Rodney T.K. Symington, B.A. (Leeds), Ph.D. (McG.), Professor

Angelika F. Arend, Staatsexamen (Kö), M.A. (Car.), D. Phil. (Oxon.), Associate Professor

Peter G. Liddell, M.A. (Edin.), Ph.D. (Brit. Col.), Associate Professor

Peter Götz, B.A. (Mannheim), M.A. (Wat.), Ph.D. (Queen's), Assistant Professor

**Visiting, Adjunct and Cross-listed Appointments:**

Ulrich P. Profitlich, Ph.D. (Bonn), Adjunct Professor (1993-95)

### GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 336.

### UNDERGRADUATE PROGRAMS

The Department provides three emphases in undergraduate studies which may be chosen either independently or in concert:

1. German Language (General, Major)
2. German Literary and Cultural Studies (General, Major, Honours)
3. German Studies (Major, Honours)

Undergraduate work is done at two successive levels: introductory at the 100/200 level, and advanced at the 300/400 level. Students may not enrol in introductory courses after having completed an advanced course in the same area; they may, however, enrol concurrently in both introductory and advanced courses with Departmental permission.

### GENERAL PROGRAMS IN LANGUAGE AND LITERARY & CULTURAL STUDIES

The General Programs consist of a minimum of 9 units of German courses numbered 300 and above. Students entering a General Program must normally complete at least 7½ units of introductory courses in the first and second years, including at least one of 254 and 261.

### MAJOR PROGRAMS IN LANGUAGE AND LITERARY & CULTURAL STUDIES

To be admitted into a Major Program, a student must have at least a C+ average in a minimum of 7½ units of introductory courses (including at least one of 254 and 261). In the third and fourth years, the Major Programs consist of a minimum of 15 units of German courses numbered 300 and above. Of these 15 units, at least 7½ units, and not more than 12, must be selected from one area of interest. Students interested in majoring in Germanic Studies are advised to consult the Department very early during their undergraduate studies, possibly in their first year of studies. Majors must have their third and fourth year programs approved by the Department.

**Arts Cooperative:** Students completing first year and choosing German as a major may be interested in exploring the Arts Cooperative option. Please see page 49 for details regarding program requirements and options.

### HONOURS PROGRAM IN GERMAN

The Honours Program provides qualified students of German the opportunity to study German more intensively than in the other programs, develop advanced analytical competence, and deepen their understanding of both the content and craft of *Germanistik*. It also prepares students for graduate studies.

Admission to the Honours Program requires a high Second Class standing in at least 7½ units of introductory courses (including at least one of 254 and 261), and the permission of the Department. Applications for admission are usually made at the end of the second year of studies but students are invited to discuss their plans at any time.

The Honours Program requires a minimum of 21 units of German courses at the 300/400 level, including the graduating essay (499). First and Second Class Honours degrees may be awarded. A First Class degree requires a first class graduating average (6.50 and above) and at least a B+ in 499. A Second Class degree requires a second class graduating average (3.50 to 6.49) and at least a B- in 499.

A student who fails to meet departmental requirements for First Class standing in the Honours Program but who has a first class graduating



average will be offered the choice between Second Class Honours and a First Class Major degree. A student who fails to meet Departmental requirements for Second Class standing but has a second class graduating average will be offered a Second Class Major degree.

Students interested in pursuing an Honours Program in German should consult page 41 about "The Honours Program" at UVic. For additional information and guidance, students should consult the Department at an early stage in their undergraduate studies.

## PROGRAMS IN GERMAN STUDIES

The German Studies Program is interdisciplinary and provides students with an "area studies" approach to German-speaking peoples by combining the study of language and literature with specially designated courses in history, geography, economics, political science, philosophy and culture. Consistent work in two or more disciplines is meant to ensure a broader competence than the other departmental programs are able to achieve. The program thereby lays the foundation for a wider choice in careers and professions for its graduates. The Department offers both a Major and an Honours program in German Studies.

Major areas of study, in addition to Germanic Studies, are at present: History in Art, History, Music, Philosophy, and Political Science.

Students should contact the Department for admission requirements and further program information.

## SUMMARY OF GERMAN PROGRAMS: MINIMUM REQUIREMENTS

### 1. GERMAN LANGUAGE

- (a) **GENERAL:** At least 7½ units of introductory courses, including 254 and/or 261; 9 units of advanced German courses, including one of 471 or 472 and at least 4½ units of 300-level language courses.
- (b) **MAJOR:** A minimum of a C+ average in at least 7½ units of introductory courses, including 254 and/or 261; 15 units of advanced German courses, including one of 471 or 472 and at least 9 units of language courses.

### 2. GERMAN LITERARY AND CULTURAL STUDIES

- (a) **GENERAL:** At least 7½ units of introductory courses, including 254 and/or 261; 9 units of advanced German courses, including 300.
- (b) **MAJOR:** A minimum of a C+ average in at least 7½ units of introductory courses, including 254 and/or 261; 15 units of advanced German courses, including 300 and at least one of 411, 412, 414, one of 416, 418, 420, one of 422, 423, 425, 426, and one of 428, 431, 432, 435.
- (c) **HONOURS:** A high Second Class standing in at least 7½ units of introductory units, including 254 and/or 261; 21 units of advanced German courses, including 300 and at least one of 411, 412, 414, one of 416, 418, 420, one of 422, 423, 425, 426, one of 428, 431, 432, 435, and 499.

### 3. GERMAN STUDIES

- (a) **MAJOR:** A minimum of a C+ average in at least 7½ units of introductory German courses, including 261; 15 units of upper level courses, including 3 units of German Studies courses (360 and 460), 3 units of advanced German language, literature and/or culture courses, 7½ units of approved courses from outside the Department (consult the Department for the appropriate list), and a 1½ unit graduating essay (490).
- (b) **HONOURS:** A high Second Class standing in at least 7½ units of introductory German courses, including 261; 21 units of upper level courses, including 3 units of German Studies courses (360 and 460), 7½ units of advanced German language, literature and/or culture courses, 9 units of approved courses from outside the Department consult the Department for the appropriate list), and a 1½ unit graduating essay (490).

## COURSES

Native speakers may not obtain credit for 100, 103 or 149. Native speakers are defined in this context as those who have spoken German since childhood and who have received sufficient instruction in German to be literate in German. They, as well as students with secondary school credit in German, and students with transfer credit from other post-secondary institutions, will be placed at an appropriate level.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### GER 100 (3) BEGINNERS' GERMAN

This course is designed for students who have no previous knowledge of German and who wish to acquire a command of the spoken and written language in preparation for more advanced work. The language centre will reinforce the learning of basic speech patterns and idioms, and will complement the active use of German in the classroom.

Y(3-1)

### GER 103 (3) INTENSIVE REVIEW OF BASIC GERMAN

Recommended for students with prior knowledge of German (German 11 or equivalent). Review the grammatical structure of the language and rapidly develop written and oral skills. Successful completion of this course with a grade of C+ or higher entitles the student to register in 251 and/or 252. (Admission by Departmental permission only) S(6-2)

### GER 149 (6) INTENSIVE GERMAN

For students with no previous knowledge of German or insufficient knowledge to enter 200, this course is designed to cover a basic two year study of the German language in one year (equivalent to 100 plus 200) and to provide a rapid and thorough grounding in how to read, write and speak German, with emphasis on making practical use of the language as early as possible. In addition, readings of short texts will be introduced at an early stage and films and slides will be shown to illustrate aspects of German-speaking countries and to serve as topics for conversation practice. (*Prerequisite:* None. Students with credit for 100 or 140, or equivalent knowledge, may not take this course for credit. Students not making satisfactory progress will be advised to transfer to 100.) Text: To be announced

Y(5-2)

### GER 200 (3) INTERMEDIATE GERMAN

This course aims at improving the student's practical mastery of the spoken and written language. Beginning at the level attained in first year German, its integrated approach to grammar review and contemporary texts focuses on the German speaking world. Classes consist of composition, translation and discussion. (Not open for credit to students who have credit for 149) (*Prerequisite:* 100)

Y(3-1)

### GER 251 (1½) WRITTEN GERMAN

A thorough review of grammar, extensive practice in composition, and an introduction to translation. Intended for students with good prior knowledge of German. (*Prerequisite:* B+ or higher in 100; or C+ or higher in 103; or Departmental permission)

F(3-0)

### GER 252 (1½) CONVERSATIONAL GERMAN

Special emphasis on reading and speaking German. Short literary and journalistic German texts will be used for oral practice, to develop reading skills, and for brief written assignments. (*Prerequisite:* B+ or higher in 100; or C+ or higher in 103; or Departmental permission)

S(3-0)

### GER 254 (1½) INTRODUCTION TO GERMAN LITERATURE

A study of literary selections from the Middle Ages to the present with special emphasis on the 20th century. Students will read widely, develop an awareness of literary movements, and be introduced to basic techniques of literary criticism. (*Prerequisite:* 4½ units of introductory language courses, or equivalent)

F(3-0)

### GER 261 (1½) MODERN GERMANY

An examination of the cultural and political changes in Germany from the 1920's to the present. Material will be drawn from literary and documentary texts, analytical essays and films. (*Prerequisite:* 3 units of 1st year language courses, or equivalent, or Departmental permission)

F(3-0)



**GER 300 (3) ADVANCED COMPOSITION: STYLISTICS AND TRANSLATION: I**

The aims of this course are to develop the student's mastery of the German language by intensive practice in the use of idiom in oral and written composition, translation, and style analysis, and to improve oral fluency by means of conversation classes. (*Prerequisite*: 200 or equivalent) (Not open to students with credit in 349) Y(3-1)

**GER 304 (3) A SURVEY OF GERMAN CULTURE (IN ENGLISH)**

A survey of outstanding cultural trends against the background of Germany's past and present. Lectures will focus on traditional concepts of German culture, and major developments in religion, philosophy, folklore, literature, art, architecture and music in an attempt to give students a cultural perspective for viewing the German way of life. Other areas of discussion will include an assessment of current attitudes to Germany past and present. Representative texts will be read and discussed in English. (Knowledge of German is not required. May be chosen as an elective by students of German with Departmental permission) NO(3-0)

**GER 310 (3) GERMAN LITERATURE IN ENGLISH TRANSLATION**

A study of major authors from the 18th Century to the present day. (*Prerequisite*: First year English or equivalent. This course is intended as an elective for students in any faculty. Knowledge of German is not required. Open to Major and Honours students in German by permission, as an elective only) Texts: Goethe, *Faust*; Spender (ed.), *Great German Short Stories*; Büchner, *Danton's Death*, *Woyzeck*; Mann, *Tonio Kröger*; Kafka, *The Metamorphosis*; Hesse, *Steppenwolf*; Brecht, *The Life of Galileo*; Dürrenmatt, *The Visit*; Weiss, *Marat/Sade*; Grass, *Cat and Mouse*. NO(3-0)

**GER 315 (1½) SCANDINAVIAN LITERATURE IN ENGLISH TRANSLATION**

A study of Scandinavian literature with the main emphasis on the literatures of Denmark, Norway and Sweden since 1800. Texts will include works from authors such as Ibsen, Strindberg, Bang, Hamsun, Dinesen, Lagerkvist, and Lagerlöf. Students with sufficient knowledge of a Scandinavian language will be encouraged to read some texts in the original. NO(3-0)

**GER 349 (6) INTERMEDIATE INTENSIVE GERMAN**

For students with first year German or equivalent knowledge, this course is designed to cover a two year study of the language in one year (equivalent to 200 plus 300). With the aim of achieving a high level of proficiency in reading, writing and speaking German, and of accelerating entry into the Department's 400 level courses, students will review grammar through intensive practice in composition, translation and oral presentations. Contemporary texts and other media (e.g. films) will be introduced at an early stage to develop skills in using and analysing idiomatic German. (*Prerequisite*: 100 or Departmental permission) (Not open to students with 149, 200, or 300. Only three (3) units of 349(6) will be used in calculating the graduating G.P.A. and in satisfying the upper level program units.) NO(5-2)

**GER 351 (1½) ADVANCED WRITTEN GERMAN: I**

Conducted entirely in German. Written exercises in vocabulary and grammar, in translation and composition and stylistic analysis. (*Prerequisite*: B+ or higher in 200; or C+ or higher in 251; or Departmental permission) F(3-0)

**GER 352 (1½) ADVANCED ORAL GERMAN: I**

Conducted entirely in German. Designed to increase oral proficiency and to develop comprehension of oral and written German. (*Prerequisite*: B+ or higher in 200; or C+ or higher in 252; or Departmental permission) S(3-0)

**GER 360 (1½) GERMAN CULTURAL TRADITION AND SOCIAL DEVELOPMENT AFTER 1750**

An interdisciplinary inquiry into artistic, social, political and intellectual movements from the Romantic era to the late 20th century with the aim of understanding German-speaking nations today. A required course for the German Studies program. (*Prerequisite*: 3 units of 2nd year language courses, or equivalent, or Departmental permission) S(3-0)

**GER 390 (3) GERMAN READING COURSE**

Rapid survey of grammar, reading of general and scientific articles, designed to meet the needs of students who have no knowledge of German, but want to gain reading comprehension in a special field. (Limited normally to students in third or fourth year or in graduate studies.) (Credit cannot be granted both for 100 or 140 and 390) Y(3-0)

**GER 400 (3) ADVANCED COMPOSITION, STYLISTICS AND TRANSLATION: II**

A continuation and reinforcement of 300 through oral presentations, composition, analysis of texts, translation, *Übersetzungskritik* and conversation based on selected texts, topics and the newspaper "Die Zeit". (*Prerequisite*: 300) Y(3-0)

**GER 405 (1½) THE NOVELLE**

As the most "dramatic" of the shorter narrative forms, the *Novelle* gave rise in the 19th century to many attempts to define its characteristic form and its emphasis on intrigue, horror, love and the apparently inexplicable aspects of life. Against this background, representative *Novellen* from Goethe to the present day will be studied and compared to other short narrative prose forms, such as the *Märchen*, *Erzählung*, and *Kurzgeschichte*. NO(3-0)

**GER 406 (1½) DRAMA AND THEATRE**

A study of the development of the German drama and its relationship to the German theatre from the 18th century (e.g. Lessing) to the present day. Representative texts will be studied, with the aim of enabling the student to understand various dramatic forms. NO(3-0)

**GER 408 (1½) POETRY**

A study of a wide range of lyric poetry from the eighteenth century to the present day with the aim of teaching the student how to read German poetry for pleasure and understanding. F(3-0)

**GER 411 (1½) MEDIEVAL GERMAN LITERATURE**

An introduction to chivalric literature and civilization through the study of writers and their works, mainly from the first *Blütezeit* in German literature (1170-1250); early *Minnesang*, Walther von der Vogelweide, *Nibelungenlied*, Hartmann von Aue, Wolfram von Eschenbach, and others. The course will also provide a basic introduction to the Middle High German language through study of the original texts. NO(3-0)

**GER 412 (1½) REFORMATION AND BAROQUE**

An examination of selected texts from the 16th and 17th centuries in order to highlight in their European context some of the key aspects of the Reformation, the Counter-Reformation and High Baroque. The course will focus on a variety of genres by principal writers and thinkers, such as Luther, Hans Sachs, Spee, Gryphius and Grimmelshausen. F(3-0)

**GER 414 (1½) ENLIGHTENMENT AND EARLY 18TH CENTURY**

Set in the context of European Enlightenment and its optimistic insistence on the primacy of Reason in all human endeavour, the course will study some of the major German contributions to rationalism and sensibility by such writers as Lessing, Klopstock, Goethe and Wieland. NO(3-0)

**GER 416 (1½) LITERATURE OF THE STORM AND STRESS**

The course explores one of the briefest literary periods (1770-1785). It analyzes the early dramatic works of Goethe, Schiller, and their contemporaries by discussing their critique of the Enlightenment, and evaluating the evolution of a new kind of socially oriented literature. NO(3-0)

**GER 418 (1½) CLASSICISM**

The course will focus on those works of Goethe, Hölderlin and Schiller that were written between Goethe's journey to Italy (1786) and his death (1832), and that are marked by the elevated style of German classical idealism. Against the background of classical antiquity, the course examines such major themes as the tragedy of the individual in political society, freedom and self-determination, and the search for lasting human values. S(3-0)



**GER 420 (1½) FAUST**

A study of selected sections of Parts I and II of Goethe's work against the background of the Faust-myth and its traditions. F(3-0)

**GER 422 (1½) ROMANTICISM**

Rooted firmly in German Idealism, this artistic movement spanned the four decades from the 1790s to the 1830s. It explored new realms of the imagination, turning to myth, folklore, fairy-tale, fantasy, dream. Giving due attention to philosophy, art and music, this course studies works by authors such as Tieck, Novalis, Brentano, E.T.A. Hoffman, the Schlegels, and probes the diversity of their poetry and prose. F(3-0)

**GER 423 (formerly half of 424) (1½) EARLY 19TH CENTURY LITERATURE**

This course studies the changes and contrasts which characterize the literature and the history of this period, from the Congress of Vienna to the rising materialism and social unrest of the mid-century (ca. 1815-1850). Philosophically, the transition from Classical-Romantic idealism to Bourgeois Realism exerts a wide variety of aesthetic and stylistic influences affecting all three genres of literature. Authors include Kleist, Büchner, Droste-Hülshoff, Grillparzer, Heine, Mörike, Storm, Keller. S(3-0)

**GER 425 (formerly half of 424) (1½) LATE 19TH CENTURY LITERATURE**

Taking account of the background of momentous political and social change, the course will study authors such as Raabe, Fontane, Hebbel, C.F. Meyer. Topics include the search for ethical stability, effects of urbanization, and a redefinition of sexual roles. NO(3-0)

**GER 426 (1½) EARLY 20TH CENTURY LITERATURE**

Within a context of political and social transformation, the course will examine works reflecting such literary movements as Naturalism, Expressionism and Impressionism. NO(3-0)

**GER 428 (1½) FROM THE WEIMAR REPUBLIC TO THE END OF W.W.II**

A study of selected works from the period ca. 1918-1945. The varied responses of authors to questions and issues of the time as reflected in the literature of the *Neue Sachlichkeit*, the Third Reich and Exile will be examined in their historical and political context. NO(3-0)

**GER 431 (1½) LITERATURE AFTER THE SECOND WORLD WAR**

A study of selected works by German, Swiss and Austrian writers attempting to come to terms with the past and beginning anew in response to WWII. S(3-0)

**GER 432 (1½) G.D.R. LITERATURE AND CULTURE**

This course will focus on the unique contribution of East Germany to German literature, culture, and art. Literary works representing the various periods in GDR cultural history, as well as examples from other art forms (e.g. painting, architecture, music) will be analyzed with regard to their aesthetic, philosophical, social, and political significance. NO(3-0)

**GER 433 (1½) "OVERCOMING THE PAST" IN NOVEL AND FILM (In English)**

This course examines how German novelists and film-makers have dealt with the problem of "overcoming the past". Apart from films that deal with this issue, selected novels will be examined as works of literature, as adaptations to film, and as social documents. Students of German will be encouraged to read passages in the original. (The Film Studies surcharge applies) (May count towards a Minor in Film Studies) F(3-0)

**GER 434A (1½) SPECIAL TOPICS**

Designed for Major and Honours students, this course may be offered either as a reading course, a tutorial, or a seminar as warranted. Students wishing to register for this course must consult with the Chair. This course may be taken more than once in different topics, with permission of the Department. FS(3-0)

**GER 434B (3) SPECIAL TOPICS**

Designed for Major and Honours students, this course may be offered either as a reading course, a tutorial, or a seminar as warranted. Students

wishing to register for this course must consult with the Chair. This course may be taken more than once in different topics, with permission of the Department. NO(3-0)

**GER 435 (1½) GERMAN LITERATURE TODAY**

A study of recent works by German, Swiss and Austrian authors and others writing in German. NO(3-0)

**GER 439 (1½) THE NEW GERMAN CINEMA (In English)**

A study of major accomplishments of the New German Cinema. This course will consider film as both a narrative form and a means of reflecting social concerns. (The Film Studies surcharge applies) (May count towards a Minor in Film Studies) (Not open to students with credit in 434A: Special Topics — The Politics of the New German Cinema) S(3-0)

**GER 444 (1½) WOMEN WRITERS (In English)**

A study of novels from the Second Women's Movement (1970s and after) by German, Austrian, and Swiss women writers. In addition, theoretical readings, short stories, and poems will be discussed. (May count towards a program in Women's Studies) F(3-0)

**GER 451 (1½) ADVANCED WRITTEN GERMAN: II**

A continuation of 351, conducted entirely in German. Frequent written exercises in vocabulary and grammar, in translation and composition, and stylistic analysis. Attention will be given to both formal and informal use of the language. (Prerequisite: B+ or higher in 300; or C+ or higher in 351; or Departmental permission) F(3-0)

**GER 452 (1½) ADVANCED ORAL GERMAN: II**

A continuation of 352, conducted entirely in German. Designed to increase oral proficiency and to develop comprehension of oral and written German. (Prerequisite: B+ or higher in 300; or C+ or higher in 352; or Departmental permission) S(3-0)

**GER 453 (1½) ADVANCED TRANSLATION**

A comparative study of idiomatic usages of English and German, and of related problems in translation; practice in translation from English to German, and from German to English. (Prerequisite: B or higher in 400 or 451; or Departmental permission) S(3-0)

**GER 460 (1½) GERMAN STUDIES TUTORIAL**

During the penultimate term of their German Studies program, students will investigate in depth a topical issue by employing critical methods pertinent to interdisciplinary research. (Prerequisite: 360, or equivalent, or Departmental permission) S(3-0)

**GER 465 (1½) THE EXISTENTIALIST TRADITION IN SCANDINAVIAN CULTURE**

With Kierkegaard as a point of departure, a study of the expression of existentialist themes in Scandinavian culture. The main emphasis will be on prose literature and drama by, for example, Ibsen, Strindberg, Lagerkvist, E. Johnson, M.A. Hansen. Attention will also be given to music, painting, and film. NO(3-0)

**GER 471 (formerly half of 403) (1½) THE EVOLUTION OF EARLY GERMAN**

A survey of the evolution of German from its Germanic origins to the mid-15th century. Focus is on historical influences affecting Old and Middle German, e.g. the Dark Ages, the Carolingian era, religion and chivalry in the Middle Ages, expansion into Central Europe and the beginnings of urban growth and a more complex society in the 14th and 15th centuries. (Prerequisite: 200 or LING 100 or Departmental permission) S(3-0)

**GER 472 (formerly half of 403) (1½) THE EVOLUTION OF MODERN GERMAN**

The course examines the influences affecting German since the invention of the printing press. These include Luther, French and English, prescriptive grammarians, German writers and scientists, industrialization, and politics and commerce in this century. (Prerequisite: 200 or LING 100 or Departmental permission) NO(3-0)



**GER 490 (1½) GRADUATING ESSAY IN GERMAN STUDIES**

In the final term of the German Studies program, students will write a graduating essay of 5,000-7,500 words. The topic will be interdisciplinary and must be approved by the Departmental German Studies Adviser and second reader (normally a faculty member representing the second area under investigation). The essay must conform to acceptable standards of style and format and be submitted before the end of classes.

FS

**GER 499 (1½) HONOURS GRADUATING ESSAY**

During either semester of the final year of their Honours program, students will write a graduating essay in German of approximately 7,500 words under the direction of a member of the Department. The essay must conform to acceptable standards of style and format and be submitted before the end of classes. An oral examination covering the topic of the essay will be given by a Departmental committee.

FS

## DEPARTMENT OF HISPANIC AND ITALIAN STUDIES

Elena Rossi, B.A. (Vassar), M.A., Ph.D., (Tor.), Associate Professor and Chair of the Department

Gregory P. Andrachuk, B.A., M.A., Ph.D. (Tor.), Professor

Lloyd H. Howard, B.A. (Brit. Col.), M.A., Ph.D. (Johns H.), Associate Professor

Caroline Monahan, B.A., M.A. (Brit. Col.), Ph.D. (Lond.), Assistant Professor

Judith A. Payne, B.A. (Spalding), M.A. (U. of Louisville), Ph.D. (Penn. St.), Assistant Professor

Rosa L. Stewart, B.A. (Ohio Wesleyan), M.A. (Mich.), Senior Instructor

**Visiting, Adjunct and Cross-listed Appointments:**

Louise Fothergill-Payne, Ph.D. (Groningen), Adjunct Professor (1994-96)

Laura J. Beard, B.A. (Carleton Coll.), M.A., Ph.D. (Johns H.), Visiting Assistant Professor (1994-95)

Shanon L. Mitchell, B.A. (U. of Vic.), M.A. (Alta.), Visiting Lecturer (1994-95)

### HISPANIC STUDIES

Students wishing to take courses in Hispanic Studies at the Third and Fourth Year levels are reminded that they must have the prerequisites of the first two years including 250 and 260. Exceptions may be made under certain circumstances after consultation with the Department.

Students wishing to take Third and Fourth Year courses must satisfy the Department that they have standing of B- or higher in 250 and 260. 250 and 260 should be taken in the Second Year and 350 and 360 in the Third Year.

Students specializing in Hispanic Studies (including Honours) will find that they have sufficient electives to enable them to concentrate in a second field — for example, Italian or another language, Classics, English, History, Linguistics. Students completing first year may be interested in exploring the Arts Cooperative Program. Please see page 49 for details regarding program requirements and options.

### PROGRAMS IN HISPANIC STUDIES

**General** — First Year: 100; Second Year: 250 and 260; Third and Fourth Years: 350 and 360 and 4½ additional units of upper level Hispanic courses, selected with the approval of the Department.

**Major** — First Year: 100; Second Year: 250 and 260; Third and Fourth Years: Spanish 350 and 360 and 10½ additional units of upper level Hispanic courses, selected with the approval of the Department.

**Honours** — First Year: 100; Second Year: 250 and 260; Third and Fourth Years: Spanish 350, 360, 450, 499 and at least 10½ units of upper level Hispanic courses, selected with the approval of the Department. Students wishing to enroll in the Honours Program must first obtain the approval of the Chair of the Department.

Students are advised to consult with the Department Chair in the selection of their courses. Hispanic Studies courses conducted in English may be credited to a General, Major or Honours Degree in Hispanic Studies to a limit of 3 units, provided all coursework is written in Spanish.

### GENERAL PROGRAM IN ITALIAN STUDIES

First Year: 100; Second Year: 200; Third and Fourth Years: 350, 370 B, C or D, and 6 additional units of upper level Italian courses. Up to 3 units may be substituted from the supporting course list below. Students

wishing to combine an Italian Studies Minor with a Major or Honours program in the Faculty of Arts and Science or the Faculty of Fine Arts may not select a supporting course from that program.

**SUPPORT COURSE LIST:**

CLAS 340 (3) Roman History

HIST 381 (1½) Medieval Italy

HA 341 (1½) Art and Architecture of the Italian Renaissance

HA 420 (1½) Special Studies in Medieval Art

(With the approval of the Department only)

HA 442 (1½) The High Renaissance in Italy

HA 443 (1½) The Late Renaissance in Italy

HA 444 (1½) Venetian Painting

HA 445 (1½) Special Studies in Renaissance Art

(With the approval of the Department only)

### COURSES

Native speakers of Spanish may not obtain credit for Spanish 100, 250 or 260. Native speakers of Italian may not obtain credit for Italian 100 or 200. A native speaker is defined in this context as a person who has spoken Spanish or Italian since childhood and who has received sufficient instruction in the languages to be literate in them. The Department will administer placement tests to assign students with previous knowledge to the appropriate level.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### SPANISH

**SPAN 100 (3) BEGINNERS' SPANISH**

Emphasis will be placed on the acquisition of the basic skills of pronunciation, reading, writing and conversation. Attention will be paid to essential points of grammar.

Y(3-1)

**SPAN 250 (formerly 290) (3) REVIEW OF GRAMMAR AND CONVERSATION**

Intensive review of grammatical structures, concentrating on the acquisition of composition and translation skills; readings will be taken from significant Spanish and Spanish American authors; one hour a week will be devoted to conversation. (NOTE: Students who intend to do major or honours work in Hispanic Studies should take this course in the Second year. May also be taken as an elective) (Not open to students with credit in 150)

Y(3-0-1)

**SPAN 260 (1½ formerly 3) INTRODUCTION TO THE LITERATURE OF SPAIN AND SPANISH AMERICA**

A study of selections from major authors of Spain and Spanish America in the genres of narrative, drama, and poetry. Students will be introduced to basic techniques of literary criticism. (Corequisite: SPAN 250)

S(3-0)

**SPAN 306 (1½) SPANISH CULTURE AND CIVILIZATION (IN ENGLISH)**

An introduction to the artistic, intellectual, social and political history of Spain from pre-Roman times to Spain today, using patterns and events to illustrate the evolution of Spanish attitudes and thought; particular attention will be made to Muslim Spain, the years of the Habsburg monarchy in Spain, the Civil War, the Franco regime, and Spain in today's world. (Knowledge of Spanish not required) NO(3-0)



**SPAN 307 (1½) LATIN AMERICAN CULTURE AND CIVILIZATION**  
(In English)

An introduction to the artistic, intellectual, social and political history of Latin America from pre-Columbian times to the present; particular attention will be paid to the indigenous cultures, the exploration and conquest and the years which led to independence (1800-1825). Contemporary political trends will be analyzed, drawing examples from the situation in Central America, the Cuban Revolution, the dictatorships in Chile and Argentina, etc. Contemporary literary and intellectual trends will be viewed through such major figures as Gabriel García Márquez, Pablo Neruda, and Jorge Luis Borges. (Knowledge of Spanish not required.) S(3-0)

**SPAN 350 (formerly 302) (3) ADVANCED COMPOSITION, TRANSLATION AND STYLISTICS: I**

This course concentrates on advancing the student's communication skills. Emphasis will be placed on the mastery of spoken Spanish, translation, composition and readings. Y(3-0)

**SPAN 360 (1½) LITERATURE OF SPAIN AND SPANISH AMERICA**

A study of works of major authors of Spain and Spanish America in the genres of narrative, drama, and poetry. Techniques of literary criticism will be reviewed and expanded. (Prerequisite: 260 or permission of the Department. Normally taken in conjunction with 350) F(3-0)

**SPAN 450 (formerly 420) (3) ADVANCED COMPOSITION, TRANSLATION AND STYLISTICS: II**

The goal of this course is to develop the student's mastery of Spanish by enhancing reading, writing and communication skills. Included will be intensive practice in composition and translation, together with an introduction to style analysis through discussion of selected texts. (Prerequisite: 302 or 350) Y(3-0)

**SPAN 470A (formerly half of 406; 406A) (1½) EARLY MEDIEVAL LITERATURE (1100-1350)**

A study of Spanish literature covering the turbulent formative period of Spain as a nation, beginning with the *Poema de mio Cid*, the epic of the warrior-hero, and ending with the ribald *Libro de buen amor*, by the Archpriest of Hita. F(3-0)

**SPAN 470B (formerly half of 406; 406B) (1½) LATE MEDIEVAL LITERATURE (1350-1500)**

A study of the major works of the late Middle Ages in Spain, dealing with aspects of Courtly Love, anti- and pro-feminism, and "immorality", beginning with the *Corbacho* by the Archpriest of Talavera, and ending with the story of the Spanish bawd, *La Celestina*. S(3-0)

**SPAN 472 (formerly 402) (1½) CERVANTES' DON QUIXOTE**

A study of *Don Quixote* in the context of Cervantes' life and times. NO(3-0)

**SPAN 473 (1½) SPECIAL STUDIES IN GOLDEN AGE LITERATURE**

Studies in the prose, poetry, drama and essay of the early and late Golden Age. The focus will be on representative authors, themes and genres not covered in 474A and 474C. Authors may include: Montemayor, Luis Vélez de Guevara, Francisco Delicado, Garcilaso de la Vega, Santa Teresa, San Juan de la Cruz, Góngora and Quevedo. (May be taken more than once depending on course content to a maximum of 3 units.) S(3-0)

**SPAN 474A (formerly part of 413 and 474B) (1½) GOLDEN AGE DRAMA**

A study of the development of Spanish drama from the advent of the commercial theatre in the mid-16th century to the end of the 17th century. Texts will be selected mainly from the works of Lope de Vega, Tirso de Molina and Calderón de la Barca. F(3-0)

**SPAN 474C (1½) THE PICARESQUE NOVEL OF THE GOLDEN AGE**

The inception and development of the picaresque novel in the 16th and 17th centuries, as represented by works such as *Lazarillo de Tormes* and *Guzmán de Alfarache*. NO(3-0)

**SPAN 476A (formerly part of 476B, 410 and 400) (1½) SPANISH LITERATURE OF THE 19TH CENTURY**

The development of the Romantic and Realist movements in Spanish drama, poetry and novel of the last century. Selected works of major authors such as Bécquer, Pardo Bazán, and Galdós will be studied in the context of the social and ideological climate of the period. NO(3-0)

**SPAN 476C (formerly 401) (1½) THE GENERATION OF 1898**

The ideological and aesthetic response of an important group of writers to the social and intellectual problems of turn of the century Spain; selected works of the major authors will be studied, with special emphasis on their fiction. NO(3-0)

**SPAN 478A (formerly 411) (1½) THE 20TH CENTURY NOVEL AFTER THE CIVIL WAR**

A study of the main currents of the modern novel in Spain, with special emphasis on individual responses to the Civil War of 1936-39 and on the development of the novel as a vehicle for social criticism. Recent trends will be examined in the light of the continuing search for new values. NO(3-0)

**SPAN 478B (formerly 412) (1½) 20TH CENTURY DRAMA AND POETRY**

A study of the drama and poetry of modern Spain, covering the works of such writers as Juan Ramón Jiménez, García Lorca, Pedro Salinas and Alfonso Sastre. NO(3-0)

**SPAN 478C (1½) SPECIAL TOPICS IN MODERN SPANISH LITERATURE**

Studies in the literature of modern Spain with special emphasis on the post-Franco period. Although primarily a study of fiction, some attention may be given to poetry and drama at the discretion of the instructor. (May be taken more than once depending on course content to a maximum of 3 units) S(3-0)

**SPAN 479 (ITAL 479) (1½) TOPICS IN HISPANIC AND ITALIAN LITERATURE**

479A Women in the Hispanic and Italian World  
A study of major women authors, characters and themes relevant to women's issues in Hispanic and Italian literature. (May be taken more than once to a maximum of 3 units depending on course content. May be given in English, Spanish or Italian) NO(3-0)

479B Renaissance in Italy and Spain (in English)  
A study of Renaissance literature and culture in Italy and Spain. The first half of the course will examine, through literature, Italy in the period 1350 to 1550: courtly life, politics, the arts, education, love, religion. The second half of the course will study, through literature, the inception and development of the Spanish Renaissance and early Golden Age, dwelling on the period 1526 to 1626. List of major figures to be discussed will include Petrarch, Machiavelli, Michelangelo, Castiglione, Garcilaso de la Vega, Herrera, St. John of the Cross, Cervantes. Selected criticism will include Burckhardt and Kristeller. NO(3-0)

**SPAN 480 (formerly 480A; formerly 414) (1½) LITERATURE OF SPANISH AMERICA FROM COLUMBUS TO MODERNISMO**

A study of the literature and literary trends of Latin America from 1492 to late nineteenth and early twentieth-century Modernismo. Special emphasis will be placed on Romanticism and Realism. F(3-0)

**SPAN 481 (1½) CONTEMPORARY SPANISH-AMERICAN LITERATURE (in English)**

Course content will vary, focusing on major authors such as Isabel Allende, Fanny Buitrago, Rosario Ferré, Gabriel García Márquez, Octavio Paz, Elena Poniatowska, and Luisa Valenzuela. (Knowledge of Spanish not required. Prerequisite: Second Year standing. May be taken more than once depending on course content to a maximum of 3 units. Not open to students with credit in 480, 482, or 483) NO(3-0)



**SPAN 482 (formerly 480B; formerly 416) (1½) STUDIES IN SPANISH-AMERICAN LITERATURE: MODERNISMO TO THE PRESENT****482A Spanish American Poetry and Prose**

Poetry, poetic prose, essay, chronicles, and travel literature of Spanish America from Modernismo to the present with emphasis on the work of figures such as José Martí, Rubén Darío, Gabriela Mistral, Pablo Neruda, Octavio Paz, and Rigoberta Menchú. F(3-0)

**482B Twentieth-Century Theatre of Spanish America**

Theatre from South America, Central America and the Caribbean, and Mexico including such dramatists as Griselda Gambaro, Luisa Josefina Hernández, René Marqués, José Triana, and Rodolfo Usigli. F(3-0)

**SPAN 483 (formerly half of 415) (1½) FICTION OF SPANISH AMERICA FROM INDEPENDENCE TO THE PRESENT****483A (formerly 480C) Fiction from Independence to the Early New Novel**

A study of representative novels and short stories from the early nineteenth century to the mid-twentieth century. Emphasis will be on prominent authors such as Mariano Azuela, María Luisa Bombal, Lydia Cabrera, and Ricardo Palma. F(3-0)

**483B (formerly 480D) Fiction from the "Boom" to the Present**

A study of novels and short stories from the mid-fifties to the present to include writers such as Isabel Allende, Julio Cortázar, Gabriel García Márquez, and Luisa Valenzuela. NO(3-0)

**SPAN 485 (1½) SPANISH FILM (In English)**

An introduction to major accomplishments in Spanish-language film, from the experimental cinema of Buñuel to post-Franco director Almodóvar. Course content will vary to include recent trends in Mexico, Argentina, Cuba and other Latin American countries. (May be taken more than once depending on course content to a maximum of 3 units) NO(3-0)

**SPAN 490 (1½) SPECIALIZED LANGUAGE STUDIES**

Not more than one of the following will be offered in any given year:

**490A (formerly 425) History of the Spanish Language**

A study of the development of the Spanish language from its origins in Vulgar Latin to its stabilization in Cervantes' time. (Prerequisite: 250) NO(3-0)

**490B (formerly 426) Translation Theory and Practice**

A review of basic linguistic and cultural patterns and the problems of translation; emphasis will be laid on the acquisition of practical experience in translating materials drawn from a large variety of fields. (Prerequisite: 350) S(3-0)

**490C Advanced Written Spanish**

Practice in composition, translation, and stylistic analysis. Attention will be given to both the formal and informal use of language. (Prerequisite: 350) NO(3-0)

**SPAN 495 (formerly 430) (1½ or 3) DIRECTED READING COURSE**

For Honours and Major students. This course may not be repeated for credit. NO

**SPAN 499 (1½) HONOURS GRADUATING ESSAY**

Honours students will write a graduating essay of 7,500 - 10,000 words, in Spanish and on an approved topic, under the direction of a member of the Department. The essay must conform to acceptable standards of style and format, and be submitted before the end of Second Term classes. An oral examination, in Spanish, covering the topic of the essay will be given. Y

**ITALIAN****ITAL 100 (3) FIRST YEAR ITALIAN**

Emphasis will be placed on the acquisition of the basic skills of pronunciation, reading, writing, and conversation. Attention will be paid to essential points of grammar. Y(3-1)

**ITAL 200 (3) SECOND YEAR ITALIAN**

A review of the fundamentals of the Italian language, designed to reinforce and develop the student's speaking skills, comprehension, and writing ability; there will be a particular focus on important finer points of grammar and translation. Readings are taken from modern Italian authors. One hour a week will be entirely devoted to conversation. Y(3-0-1)

**ITAL 306 (1½) ITALIAN CULTURE AND CIVILIZATION (In English)**

An introduction to artistic, intellectual, social and political trends in Italy from pre-Roman times to the 20th century, using the cultural history of five cities, Florence, Venice, Rome, Naples and Milan, to illustrate them. Specific reference will be made to the communes and city states, the Renaissance, the Risorgimento, the Fascist regime, and the Resistenza. (Knowledge of Italian not required) NO(3-0)

**ITAL 350 (formerly 310) (1½) ADVANCED GRAMMAR AND TRANSLATION**

Conducted entirely in Italian, this course is designed to increase oral proficiency, and to aid written expression through grammatical analysis, translation, and composition. (Not open to students with credit in 302) F(3-0)

**ITAL 370 (1½) STUDIES IN ITALIAN LITERATURE**

Not more than one of the following will be offered each year:

370B Selected Authors before the 20th Century (May be taken more than once depending on course content to a maximum of 3 units) NO(3-0)

370C (formerly 311) Selected Authors of the 20th Century (May be taken more than once depending on course content to a maximum of 3 units) S(3-0)

370D The Italian Drama NO(3-0)

**ITAL 470 (formerly 403) (1½, formerly 3) DANTE'S DIVINE COMEDY (In English)**

A study of all three parts of the *Divine Comedy*: the *Inferno*, the *Purgatorio*, and the *Paradiso*, and their relationship to Courtly Love, mythology, theology, and medieval thought in general. (Prerequisite: Second year standing) F(3-0)

**ITAL 472 (1½) PETRARCH AND BOCCACCIO (In English)**

A study of Petrarch's *Canzoniere* and Boccaccio's *Decameron*, and their relationship to the changing world of the late Middle Ages and their anticipation of the Renaissance and Humanism. (Prerequisite: Second year standing) NO(3-0)

**ITAL 479 (SPAN 479) (1½) TOPICS IN HISPANIC AND ITALIAN LITERATURE****479A Women in the Hispanic and Italian World**

A study of major women authors, characters and themes relevant to women's issues in Hispanic and Italian literature. (May be taken more than once to a maximum of 3 units depending on course content. May be given in English, Spanish or Italian) NO(3-0)

**479B Renaissance in Italy and Spain (In English)**

A study of Renaissance literature and culture in Italy and Spain. The first half of the course will examine, through literature, Italy in the period 1350 to 1550: courtly life, politics, the arts, education, love, religion. The second half of the course will study, through literature, the inception and development of the Spanish Renaissance and early Golden Age, dwelling on the period 1526 to 1626. List of major figures to be discussed will include Petrarch, Machiavelli, Michelangelo, Castiglione, Garcilaso de la Vega, Herrera, St. John of the Cross, Cervantes. Selected criticism will include Burckhardt and Kristeller. NO(3-0)

**ITAL 485 (1½) ITALIAN FILM (In English)**

An introduction to major accomplishments in Italian film, from the start of the talkies during Fascist times to contemporary cinema with special emphasis on directors such as De Sica, Rossellini, Fellini and Wertmüller. (May be taken more than once depending on course content to a maximum of 3 units) NO(3-0)

**PORTUGUESE****PORT 481 (1½) CONTEMPORARY BRAZILIAN LITERATURE (In English)**

Content will vary, focusing on major authors such as Jorge Amado, Clarice Lispector, Nélida Piñon, Raquel Queiroz, João Guimarães Rosa, and Lygia Fagundes Telles. (Knowledge of Portuguese not required. Prerequisite: Second Year standing. May be taken more than once depending on course content to a maximum of 3 units.) NO(3-0)



## DEPARTMENT OF HISTORY

Wesley T. Wooley, A.B. (Ill.), A.M., Ph.D. (Chic.), Associate Professor and Chair of the Department

Peter A. Baskerville, B.A. (Tor.), M.A., Ph.D. (Queen's), Professor

Harold G. Coward, B.A., M.A. (Alta.), Ph.D. (McM.), Professor

Ralph C. Croizier, B.A. (Brit. Col.), M.A. (Wash.), Ph.D. (Calif., Berk.), Professor

Brian W. Dippie, B.A. (Alta.), M.A. (Wyo.), Ph.D. (Tex.), Professor

G.R. Ian MacPherson, B.A. (Assumption U. of Windsor), M.A., Ph.D. (W. Ont.), Professor

Angus G. McLaren, B.A. (Brit. Col.), M.A., Ph.D. (Harv.), Professor

Patricia E. Roy, B.A. (Brit. Col.), M.A. (Tor.), Ph.D. (Brit. Col.), Professor

Eric W. Sager, B.A., Ph.D. (Brit. Col.), Professor

E. Patricia Tsurumi, B.A. (Brit. Col.), A.M., Ph.D. (Harv.), Professor

Robert S. Alexander, B.A. (W. Ont.), M.A. (Tor.), Ph.D. (Cantab.), Associate Professor

John Money, B.A., M.A., Ph.D. (Cantab.), F.R.Hist.S., Associate Professor

Thomas J. Saunders, B.A. (York), M.A., Ph.D. (Tor.), Associate Professor

Donald L. Senese, A.B., Ph.D. (Harv.), Associate Professor

Paul B. Wood, B.A. (W. Ont.), M. Phil. (Lond.), Ph.D. (Leeds), Associate Professor

David Zimmerman, B.A. (Tor.), M.A., Ph.D. (New Br.), Associate Professor

A. Perry Biddiscombe, B.A., M.A. (New Br.), Ph.D. (Lond. Sch. Econ.), Assistant Professor

Gregory R. Blue, B.A. (St. Vincent de Paul), B. Phil. (U. Catholique Louvain), Ph.D. (Cantab.) Assistant Professor

M.L. (Mariel) Grant, B.A. (Trent), D.Phil. (Oxon.), Assistant Professor

Timothy S. Haskett, B.A., M.A., Ph.D. (Tor.), Assistant Professor

Lynne S. Marks, B.A. (Tor.), M.A., Ph.D. (York), Assistant Professor

Robert J. McCue, B.A., B.Ed. (Alta.), M.A., Ph.D. (B.Y.U.), Assistant Professor

M. Michèle Mulchahey, B.A., B.A. (Rice), M.A. (Tor.), M.S.L. (Pontifical Inst.), Ph.D. (Tor.), Assistant Professor

Phyllis M. Senese, B.A. (Tor.), M.A. (Car.), Ph.D. (York), Assistant Professor

Elizabeth Vibert, B.A. (Dal.), M.A. (E. Anglia), D.Phil. (Oxon.), Assistant Professor

### Visiting, Adjunct and Cross-listed Appointments:

Kenneth S. Coates, B.A. (Brit. Col.), M.A. (Man.), Ph.D. (Brit. Col.), Adjunct Professor (1994-96)

Lorne F. Hammond, B.A., M.A. (U. of Vic.), Ph.D. (Ott.), Visiting Assistant Professor (1994-95)

Sebastian Siebel-Achenbach, B.A. (Tor.), D.Phil. (Oxon.), Visiting Assistant Professor (1994-95)

Scott W. Murray, B.A. (Calg.), M.A. (Brit. Col.), Visiting Lecturer (1994-95)

Diana E. Wright, B.A., M.A. (Mich.), Visiting Lecturer (1994-95)

## GRADUATE PROGRAM

**1.00** For information on studies leading to the M.A. and Ph.D. degree, see page 336.

## UNDERGRADUATE PROGRAMS

**2.00** The Department offers undergraduate course work at two levels: introductory courses at the 100-200 level, open to first and second year students; and advanced courses at the 300-400 level, open to students in both third and fourth years. Students are strongly advised to complete introductory courses in a given area before undertaking advanced courses in the same area. Students may not enroll in introductory courses after completing an advanced course in the same area; students may not enroll concurrently in introductory and advanced courses in the same area without written permission from the instructor in the advanced course. Please note that enrollment in seminars is limited and that the consent of the instructor is required for registration. In some instances, seminars in the first term may be offered again in the second if there is sufficient demand.

All history courses require substantial written and reading assignments. Information about textbooks in all courses is available from the bookstore.

## GENERAL

**2.10** The General Program consists of any 9 units of history courses numbered 300 and above in the third and fourth years. Students entering the General Program should normally complete 6 units of introductory history courses in the first and second years.

## MAJOR

**2.11** To be admitted to the Major Program, a student should have a C average in 6 units of introductory history courses. In the third and fourth years, the student must take 15 units in history courses numbered 300 and above. Of these 15 units, a minimum of 6 and a maximum of 12 units should be selected from one area of interest. In addition, 9 units of nonhistory courses must be selected in consultation with the department adviser to Majors. Students interested in majoring in history are advised to consult the Majors Adviser in their first year if possible. Majors must have their third and fourth year programs approved by the Majors Adviser.

**2.12** For a Major in history, a maximum of 3 units taken from Classical Studies 330, 340, 480A and 480C may be accepted in lieu of a course in European history.

## Arts Cooperative

**2.13** Students completing first year and choosing History as a major may be interested in exploring the Arts Cooperative option. Please see page 49 for details regarding program requirements and options.

## HONOURS

**2.14** In the Honours Program, students have the opportunity to study history more independently and intensively than is normally possible in the Major and General Program. Through small seminars, directed readings, and individual instruction in writing and research, the Honours Program encourages students to think critically and to deepen their understanding of both the content and craft of history. While the primary intent of the Honours Program is to help any interested and talented student of history achieve an excellent education in the liberal arts, the Program should be especially useful for students contemplating graduate work in history or careers in high school teaching, journalism, law, library science, or government service.

**2.15** The Honours Program consists of 30 units of course work normally taken during a student's third and fourth years of study. Honours students must complete, usually by the end of their third year, 480, Approaches to History, and 495, an honours tutorial requiring a research essay of 7,500-10,000 words. During their fourth year, students may take either 496, a second honours tutorial requiring a 7,500-10,000 word research essay, or 497, a course enabling students to expand their third year research essays into theses of 15,000-25,000 words.

As part of 496 and 497 an oral examination will be conducted by a committee composed of the faculty supervisor of the paper, the second reader of the paper and the departmental Honours Adviser. The examination will be open to other interested members of the department.

Honours students must complete an additional nine units of history at the advanced level and twelve units of electives chosen in consultation with the Honours advisor. Students are required to demonstrate a reading knowledge of a language other than English by passing, with at least a C, a 200 level language course, a language reading course or a special translation examination administered by the Department of History.

**2.16** Admission to the Honours Program requires a high second class standing in six units of history courses or seminars. Application for admission to the Honours Program should normally be made in the spring, during the student's second year, although a small number of third year applications may also be accepted.

**2.17** Honours candidates are required to have their program of courses approved by the Honours Adviser. To avoid overspecialization, Honours students are encouraged to study more than one area of history and to choose several courses outside the Department of History. Candidates



whose performance is unsatisfactory may be required to transfer from the Honours Program to the Major Program. Admission to the fourth year Honours Program is conditional upon satisfactory performance in the third year.

**2.18** First and Second Class Honours degrees may be awarded. A First Class degree requires a first class graduating average and at least a 5.50 average in Honours courses (480, 495, 496 and 497). If an honours student has a first class graduating average but has averaged 2.50 to 5.49 in Honours courses, the student will be given the option of receiving Second Class Honours or a First Class Major. A Second Class degree requires a second class graduating average and at least a 2.50 average in Honours courses.

## UNDERGRADUATE COURSES

NOTE: A brochure will be available through the department office at the start of the advance registration period, and will include any changes in scheduling made after publication of the University Calendar, as well as additional information not available at that time.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### INTRODUCTORY COURSES

Students should consult the Department concerning courses offered in any particular year.

Please note — first year students may enroll in introductory courses at the 200 level.

#### HIST 105 (formerly 242) (3) INTRODUCTION TO 20TH CENTURY WORLD HISTORY

This is a broad interpretive survey of the major forces that have shaped the contemporary world from the end of World War I to the present. Particular emphasis is placed on the global spread of Western ideas and institutions, on the rise of the Third World, and on growing interdependence among nations. A lecture course with audio visual presentations and optional discussion sections. (3-0)

#### HIST 130 (formerly 230) (3) HISTORY OF CANADA

A survey of Canadian development from the beginning of the French regime to the present. This course is strongly recommended to students wishing to take advanced courses in Canadian history. (3-0)

#### HIST 205 (1½ or 3) INTRODUCTION TO HISTORY

An introduction to methods and approaches used by various schools of historical analysis in attempting to understand the nature of political, cultural, social and economic history. Particular subject varies at the discretion of the instructor. (May not be taken more than once for credit) (NO(3-0))

#### HIST 210 (3) HISTORY OF THE UNITED STATES

A general survey of the history of the United States of America from the colonial period to the present. This course is strongly recommended to students wishing to take advanced courses in American History. (3-0)

#### HIST 220 (3) HISTORY OF ENGLAND

History 220 is designed as a course for those who wish some acquaintance with the broad sweep of British history since the Norman Conquest. It may be used as a terminal course, complete in itself, or it may be used as a preliminary to more intensive study. This course is strongly recommended to students wishing to take advanced courses in British history. (3-0)

#### HIST 234 (3) MAIN CURRENTS OF WESTERN THOUGHT

A survey of the most influential ideas and intellectual movements of western culture from their origins, in Greece and the Middle East, to recent times. Not open to students who have credit for History 400. (NO(3-0))

#### \*HIST 236 (3) MEDIEVAL EUROPE

Survey of the middle ages in western Europe from about A.D. 300 to 1500, tracing not only the general political, social, and religious history of the West, but also concurrent developments in art, learning, literature, and law. This course is required for students wishing to take advanced courses in medieval history and is strongly recommended for Medieval Studies majors and minors. (3-0)

#### \* HIST 240 (3) HISTORY OF MODERN EUROPE

After providing a brief background in medieval institutions, this course surveys European history from the Renaissance to the mid 20th century. The lectures will focus on political, intellectual, cultural, and social aspects of European society and the modern state as it emerges in the contemporary world. (3-0)

#### HIST 250 (H A 250) (1½) MIDDLE EASTERN CIVILIZATION: THE ANCIENT WORLD

A survey of the art and architecture of the ancient Near East and Egypt from the 4th millennium B.C. to the 7th century A.D. The art and architecture of the many cultures of the ancient Near East are presented in the context of important political events; the relationships between religion, history, literature and art are given particular attention. (NO(3-0))

#### HIST 251 (H A 251) (1½) MIDDLE EASTERN CIVILIZATION: ISLAM

A survey of the art and architecture of the Islamic world, beginning with the rise of Islam in the 7th century and continuing into the 19th century. The primary emphasis of the course is on the architectural monuments and objects of the Islamic world, and on gaining an understanding of Islamic society. The political history of the Islamic Middle East provides a chronological framework for the study of art and architecture. (NO(3-0))

#### HIST 253 (formerly half of 252) (1½) INTRODUCTION TO CHINESE CIVILIZATION

Selected topics in the political, social, intellectual, and economic history of Chinese civilization. (This course is a prerequisite to 433A and 433B) (Not open to students with credit in PACI 253) (NO(3-0))

#### HIST 254 (1½) CHINA AND THE WEST

Introductory survey of modern Chinese history with particular emphasis on China's relations with the West. The period covered will be from the 17th century but most emphasis will be on the last 150 years. (This course is a prerequisite for all upper level courses in modern Chinese history) (Not open to students with credit in PACI 254) (NO(3-0))

#### HIST 255 (formerly half of 252) (1½) INTRODUCTION TO JAPANESE CIVILIZATION BEFORE THE 19TH CENTURY

Traditional civilization in Japan from earliest times to the end of the 18th century. Topics in political, social, intellectual, cultural and economic history will be considered. (This course is a prerequisite to 435) (Not open to students with credit in PACI 255) (F(3-0))

#### HIST 256 (1½) INTRODUCTION TO MODERN JAPAN

Modern Japanese history from the 18th century to the present. Review of the last century of "traditional Japan," and the country's transformation to a modern state. Last section of the course will deal with the post 1945 period. (This course is a prerequisite for all upper level courses in modern Japanese history) (Not open to students with credit in PACI 256) (S(3-0))

#### HIST 257 (1½) INTRODUCTION TO THE CIVILIZATION OF INDIA

Introductory survey of India's traditional civilization from earliest times to the present. Topics include religious, social, intellectual, and cultural history. (Not open to students with credit for 205 F01 or S01 in 1992-93) (F(3-0))

#### HIST 260 (1½) HISTORY OF SCIENCE

A general survey of some of the major achievements of Western science from antiquity to the present: Aristotle, Galileo, Darwin and Einstein will be among those thinkers whose work is examined. (F(3-0))

#### HIST 261 (1½) HISTORY OF TECHNOLOGY

A general survey of the consequences of technological change on society since the beginning of the Industrial Revolution. Topics include: transportation, communications, military, industrial and domestic technology. (NO(3-0))



**HIST 265 (1½ or 3) SPECIAL TOPICS IN HISTORY**

An introduction in selected problems in history. The specific topics vary from year to year. (May be taken for credit more than once in different topics with permission of the Chair of the Department to a maximum of 9 units)

"Survey of German History" F(3-0)  
 "World History: Civilizations in Contact and Conflict" Y(3-0)

\* 236 and 240 are introductory courses to European history and as such are recommended to all Major and Honours candidates as well as to students who are not intending to specialize in history.

**ADVANCED COURSES:****AMERICAN****HIST 300 (3) COLONIAL NORTH AMERICA**

The British American colonies from their founding to the disruption of the first British Empire, with emphasis on intellectual, social, and economic development. NO(3-0)

**HIST 301 (3) THE UNITED STATES IN THE 19TH CENTURY**

A study of the social, political, cultural, and economic development of the United States in the period from the framing of the Constitution to the Spanish-American War, with particular concentration on certain significant themes. NO(3-0)

**HIST 304 (3) THE UNITED STATES IN THE 20TH CENTURY**

An intensive study of American political, economic, and social history from the late 19th century to the present. Various major themes will be examined: industrialization, the growth of corporate power, urbanization, racial and ethnic relations, cultural change, and liberal reform. Particular attention will be devoted to the economic, social, and cultural determinants of American political history. NO(3-0)

**HIST 308 (3) AMERICAN INTELLECTUAL HISTORY**

A study of the evolution of American institutions and ideas. Emphasis will be given to selected aspects of the nation's cultural life. (3-0)

**HIST 310 (3) THE AMERICAN WEST**

The frontier in American history, the Trans-Mississippi West with emphasis on the Far West. NO(3-0)

**HIST 315 (3) AMERICAN DIPLOMATIC HISTORY**

A study of American foreign relations with emphasis on the 20th century and the history of American diplomatic thought. (3-0)

**HIST 318 (1½) TOPICS IN AMERICAN HISTORY**

An intensive study of selected aspects of American history. Students are advised to consult the Department for an outline of the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department.)

F01: "The American Experience in Vietnam"

F02: TBA

S01: TBA

FS(3-0)

**HIST 319 (1½ or 3) SEMINAR IN AMERICAN HISTORY**

Selected topics in American history. Enrollment limited. Priority in registration given to Honours and Major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department.)

Y01: TBA

(3-0)

F01: "Western Art and Western Myth"

(3-0)

S01: TBA

(3-0)

**BRITISH****HIST 320 (1½) MEDIEVAL ENGLAND**

A detailed examination of themes and issues such as: late Roman Britain; Anglo-Saxon society; impact of the Norman conquest; development of kingship and representative government; role of law in medieval English life; archaeological and archival sources for medieval English history; universities of Oxford and Cambridge; role of the

Church in the governance of England; transition in the 15th century from the medieval kingdom to the early modern state. (Prerequisite: 236 or permission of instructor) NO(3-0)

**HIST 321 (3) THE RISE AND FALL OF THE TUDOR STATE**

An intensive study of Monarchy, Church and Society in England under the impact of renaissance ideas, religious reformation and price inflation, from the final phase of medieval monarchy in the late 15th century to the breakdown of the institutions and relationships of Tudor government prior to the outbreak of Civil War in 1643. (Prerequisite: 220) NO(3-0)

**HIST 322 (3) THE ENGLISH REVOLUTION AND ITS SETTLEMENT, 1643-1715**

The principal themes in the development and consequences of the "Great Rebellion" and the "Revolution of 1688." The course will consider interpretive problems raised by the political, social, and intellectual influence of these events in both British and European history. (Not open to students with credit for 323 (Britain, 1660-1815) prior to 1982-83) (Prerequisite: 220) NO(3-0)

**HIST 323 (3) BRITAIN, 1714-1815**

Britain from the accession of George I to Waterloo — an intensive study of the roots of political stability and of social change, and of the consequences of their interaction in Britain in the 18th century. (Prerequisite: 220) NO(3-0)

**HIST 325 (3) BRITAIN, 1815-1914**

Great Britain, industry and empire; an intensive study of British history during the 19th century. (Prerequisite: 220) (3-0)

**HIST 327 (3) 20TH CENTURY BRITAIN**

An examination of the major themes in the history of 20th century Britain, such as the collapse of imperial power, the development of closer relations with the European continent, and the social, cultural, and political tensions created by an era of rapid change and economic decline. (Prerequisite: 220) NO(3-0)

**HIST 338 (1½ or 3) SEMINAR IN BRITISH HISTORY**

Selected topics in British history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of the instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department) (Prerequisite: 220)

F01: "Mass Media, Culture and Society in Great Britain, 1890-1945"

F(3-0)

S01: "The Enlightenment in England, 1688-1800"

S(3-0)

S02: "The British Aristocracy in the 19th and 20th centuries"

S(3-0)

**CANADIAN****HIST 340 (1½) NEW FRANCE**

A seminar on the French regime in Canada from 1500 to 1763. Themes include European imperialism, migration and land settlement, the colonial economy, Amerindian-European contact, social structures, political development, and the emergence of a distinct culture. (130 and a reading knowledge of French would be useful but are not required) S(3-0)

**HIST 341 (formerly 482) (1½ or 3) HISTORIANS AND THE COMPUTER: THEORY AND TECHNIQUES OF SOCIAL SCIENCE HISTORY**

The course has two main goals: to help students understand and assess research based on quantitative analysis, and to help students gain firsthand experience in the use of computers in Canadian historical research. Students will carry out their own quantitative research project. (Not open to students with credit in 482) F(3-0)

**HIST 342 (3) BRITISH NORTH AMERICA, CONQUEST TO CONFEDERATION**

A combination of lectures and seminars examining the development of the economy, society, and culture of the area comprising present day Ontario, Québec, and the Maritimes. Particular emphasis will be placed upon the emergence of distinct social and cultural entities in each of these areas. NO(3-0)



**HIST 343 (3) CANADIAN LABOUR HISTORY**

This course examines the working class experience and the development of organized labour movements in Canada, with particular emphasis on the 19th and 20th centuries. Topics include preindustrial working conditions, industrialization, labour organizations, the growth of trade unions, labour legislation, and labour politics. (*Prerequisite*: 130 or consent of the instructor) (3-0)

**HIST 344 (3) POLITICAL HISTORY OF CANADA SINCE CONFEDERATION**

A study of recurring themes and problems in Canadian history including national policies, French-English tensions, federal-provincial conflicts, and external relations. Attention will be given to the social and economic background of these problems as well as their political manifestations. (3-0)

**HIST 345 (1½) TOPICS IN CANADIAN-AMERICAN RELATIONS**

Selected topics in the economic, cultural, political, and diplomatic aspects of Canadian-American relations. (Students with credit for 358 should consult the instructor before enrolling in this course.)

F01: "Conflict and Harmony, 1867-1980"

F(3-0)

**HIST 347 (3) BUSINESS AND SOCIETY IN PERSPECTIVE: THE CANADIAN EXPERIENCE, 1800-1970**

This course examines the changing function of the entrepreneur within Canadian society. There will be particular emphasis on business relations with labour, consumers, and politicians; self perception within the business community; and the influence of British, American, and multinational corporations on the development of a Canadian entrepreneurial class. (3-0)

**HIST 348 (3) SOCIAL AND INTELLECTUAL HISTORY OF CANADA**

A thematic study of the major intellectual and social attitudes, values, assumptions, and expectations in 19th and 20th century Canada. Students will examine original works by Canadians in a number of disciplines including history, politics, the social sciences, literature and art. (3-0)

**HIST 349 (1½) EDUCATION AND CHILDHOOD IN CANADIAN HISTORY**

This course examines the social, political, and ideological context of the development of educational systems in Canada. It emphasizes such topics as concepts of childhood, the interrelationships of school and society, and the nature of educational reform. (3-0)

**HIST 350A (formerly half of 350) (1½) PRAIRIE HISTORY TO 1905**

The early history of the Prairie region; with special emphasis on such topics as native societies before the arrival of Europeans, the fur trade societies established by the Hudson's Bay Company and the St. Lawrence merchants, the Selkirk and other early settlements, the Métis civilization, the establishment of Manitoba, the North West Rebellion, and the establishment of Saskatchewan and Alberta. (3-0)

**HIST 350B (formerly half of 350) (1½) PRAIRIE HISTORY SINCE 1905**

Emergence of the Prairie region after the creation of Alberta and Saskatchewan with particular emphasis on the immigration boom, the growth of cities, the wheat economy, agrarian and labour radicalism, the impact of the World Wars, the third party tradition, recent resource development, and the role of the region in national political development. (3-0)

**HIST 350C (1½ or 3) RESEARCH SEMINAR IN PRAIRIE HISTORY**

Selected topics in Prairie History; the historiography of the region and methods of research will receive special emphasis. (*Prerequisite*: 350 or 350A or 350B or written consent of the instructor) (3-0)

**HIST 351 (3) QUEBEC**

A seminar on the province of Quebec from 1763 to the present emphasizing the development of a unique society in Quebec. (130 and a reading knowledge of French would be useful but are not required.) (3-0)

**HIST 352 (1½) SEMINAR IN FRENCH CANADA**

A study of selected problems in French Canadian history stressing patterns in intellectual, social and economic development, emphasizing the 19th and 20th centuries. This course will be taught as a seminar, and will be offered in alternate years only. (*Prerequisite*: 130 and a reading knowledge of French, or written consent of the instructor) (3-0)

**HIST 353 (1½ or 3) SEMINAR IN BRITISH COLUMBIAN HISTORY**

Selected topics in British Columbian history. Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of the instructor. Students are advised to consult the Department about the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department.) (3-0)

**HIST 354A (1½) NORTHWEST AMERICA TO 1849**

Surveys early history and literature of region west of Rocky Mountains and north of California prior to the establishment of the colony of Vancouver Island in 1849. Topics include maritime and overland exploration, European rivalries and claims, the development of the maritime and overland fur trade, and Indian-white relations. (3-0)

**HIST 354B (1½) BRITISH COLUMBIA, 1849-1900**

A study of the foundations of modern British Columbia, beginning with the founding of the colony of Vancouver Island to the emergence of provincial political parties about the end of the 19th century; topics to be considered will include the colonies of Vancouver Island and British Columbia, the gold rush, settlement patterns, the origins of institutional life, Indian policy and Indian-white relations, and early federal-provincial relations. (*Prerequisite*: 130 or 354A or consent of the instructor) (3-0)

**HIST 355 (3; formerly 1½) BRITISH COLUMBIA SINCE 1885**

The emphasis will be on social, economic, and political developments within the province. Written assignments will be required. (3-0)

**HIST 356 (3) CANADIAN CONSTITUTIONAL HISTORY**

A study of the evolution of the Canadian Constitution from 1763 to the present. (3-0)

**HIST 357A (1½) SEMINAR IN CANADIAN DEFENCE POLICY**

A study of selected aspects of Canadian defence policy since 1867. Emphasis on the military policies and strategic role of Canada in the 20th century (Enrollment limited) (*Prerequisite*: 130 or consent of the instructor) (3-0)

**HIST 357B (1½) SEMINAR IN CANADIAN EXTERNAL POLICY**

A study of selected aspects of Canadian external policy since 1867, with emphasis on Canada's position as a middle power. (Enrollment limited) (*Prerequisite*: 130 or consent of the instructor) (3-0)

**HIST 358 (1½ or 3) TOPICS IN CANADIAN HISTORY**

An intensive study of selected aspects of Canadian history. (May be taken more than once with the permission of the Chair of the Department to a maximum of 9 units)

"Topic TBA"

(3-0)

**HIST 358A (1½ or 3) WOMEN IN CANADA**

A history of women in Canada from the era of New France to the present. (Not open to students with credit for this topic in 358) (3-0)

**HIST 358B (1½) NORTHERN CANADA**

An examination of themes in the development of the northern Canadian economy and society including the post World War two period. (Not open to students with credit for this topic in 358 or 359) (3-0)

**HIST 358C (3) NATIVES AND NEWCOMERS: HISTORICAL ENCOUNTERS IN CANADA**

An examination of the relationship between Canada's Aboriginal population and immigrants from first contact through to the constitutional and legal battles of the 1980s. (Not open to students with credit for this topic in 358 or 359) (3-0)



**HIST 358D (3) RACISM AND ANTISEMITISM IN CANADA**

An examination of the origins of racism and antisemitism in the Western world and their establishment and evolution in Canada. (Not open to students with credit for this topic in 358 or 359) Y(3-0)

**HIST 358E (1½) CANADIAN SCIENCE AND TECHNOLOGY**

An examination of the history of Canadian science and technology from New France until the present. (Prerequisite: 6 units of History) NO(3-0)

**HIST 359 (1½ or 3) SEMINAR IN CANADIAN HISTORY**

Selected topics in Canadian history. (Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered.) (May be taken more than once in different topics with permission of the Chair of the Department)

S01: "Social and Cultural History of the Fur Trade" S(3-0)

S02: "Topic TBA" S(3-0)

**EUROPEAN****HIST 360 (1½) THE RENAISSANCE**

A study of the conditions, ideas, and people involved in the intellectual quickening that ushered in the early modern period of European history. F(3-0)

**HIST 361 (1½) THE REFORMATION**

A history of the people, and the political and religious factors involved in the upheavals of the Protestant and Roman Catholic reformations. S(3-0)

**HIST 362 (1½) EUROPE UNDER THE ANCIENT REGIME**

Preindustrial Europe in the 17th and 18th centuries. A social and cultural history of Western Europe. Emphasis will be placed on sex roles, household and family structure, religious beliefs, economic relations, and attitudes towards crime, madness and poverty. (Prerequisite: None; 240 recommended) NO(3-0)

**HIST 363 (1½) REVOLUTIONARY AND NAPOLEONIC EUROPE**

The political, social and cultural impact of the French Revolution and Napoleonic Empire. (Prerequisite: 240) F(3-0)

**HIST 364A (1½) FRENCH DIPLOMACY, 1815-1914**

A seminar on the relationship between domestic and foreign policies, exploring the impact of ideology on French diplomacy. (Prerequisite: 370A, 363 recommended) NO(3-0)

**HIST 364B (1½) FRENCH DIPLOMACY, 1914-82**

A seminar on France's search for security within Europe and Empire abroad. (Prerequisite: 370B; 364A strongly recommended) NO(3-0)

**HIST 365A (1½) SOCIAL AND CULTURAL HISTORY OF MODERN EUROPE: 1770-1848**

The early industrial society of 19th century Europe. An examination of the initial impact of the commercial and industrial revolutions on Europe in the first half of the 19th century with special attention being paid to the transformation of everyday life, the growth of cities, and the making of the working and middle classes. (Prerequisite: None; 240 recommended) F(3-0)

**HIST 365B (1½) SOCIAL, CULTURAL, AND POLITICAL HISTORY OF MODERN EUROPE: 1848-1914**

The mature industrial society of late 19th century Europe. An examination of the full flowering of industrial society in the latter half of the 19th century with special attention being paid to the acceleration of economic development, the stabilization of urban life, the professionalization of culture, and the bureaucratization of business and government. (Prerequisite: None; 240 recommended) S(3-0)

**HIST 366 (1½) EUROPE BETWEEN TWO WORLD WARS**

This course will examine the impact of the First World War on European society through its effect on the international order and the rise of totalitarian ideologies such as communism and fascism. (Prerequisite: None; 105 or 240 recommended) F(3-0)

**HIST 367 (1½) THE SECOND WORLD WAR AND THE RECOVERY OF WESTERN EUROPE**

An examination of the effects of the Second World War on Europe, and the recovery of the Western European states in the postwar period. (Prerequisites: None; 105 or 240 recommended) S(3-0)

**HIST 370A (formerly 370) (1½) REACTION, REFORM AND REVOLUTION IN FRANCE, 1814-1914**

The struggle to implement the ideals of the French Revolution of 1789 in politics and society. (Prerequisite: 240; 363 recommended) NO(3-0)

**HIST 370B (formerly 371) (1½) REACTION, REFORM AND REVOLUTION IN FRANCE, 1914-1982**

The struggle to implement the ideals of the French Revolution of 1789 in 20th century politics and society. (Prerequisite: 240; 370A strongly recommended) S(3-0)

**HIST 371A (1½) IMAGE AND REALITY: SCANDALS IN FRANCE, 1785-1870**

A seminar exploring notorious political, economic and sexual scandals and evaluating contemporary values and political accountability. (Prerequisite: 363 or 370A) S(3-0)

**HIST 371B (1½) IMAGE AND REALITY: SCANDALS IN FRANCE, 1870-1982**

A seminar exploring notorious political, economic and sexual scandals and evaluating contemporary values and political accountability. (Prerequisite: 370A or 370B; 371A recommended) NO(3-0)

**HIST 372 (1½) IMPERIAL GERMANY**

An examination of the principal themes in German history between the formation of the united state in 1871 and the German revolution of 1918-1919. (Prerequisite: None; 240 recommended) F(3-0)

**HIST 373 (1½) WEIMAR AND NAZI GERMANY**

An examination of the principal themes and developments in German history between the end of World War One and the collapse of the Third Reich in 1945. (Prerequisite: None; 105 or 240 recommended) S(3-0)

**HIST 374 (SLAV 374) (3) IMPERIAL RUSSIA, 1689-1917**

A history of Russia from Peter the Great to the fall of the monarchy. The course traces the response of the Russian state and Russian society to changing national needs and the challenge of the West. Through reports and discussions, emphasis will be given to periods of rapid change. (3-0)

**HIST 376 (SLAV 376) (1½) THE SOVIET UNION, 1917-1991**

A history of the Soviet Union from its origins to its dissolution. This course will examine the policies of the Communist leadership and the impact of these policies on the U.S.S.R. and the world. In addition, emphasis will be given to those aspects of Soviet life that developed independently of and contrary to the wishes of the leadership. S(3-0)

**HIST 380A (1½ or 3) (formerly 380) TOPICS IN MEDIEVAL EUROPE**

A detailed study of selected problems in the history of Medieval Europe. The specific topics to be considered will vary from year to year. (May be taken more than once in different topics with permission of the Chair of the Department) (Prerequisite: 236 or permission of instructor) NO(3-0)

**HIST 380B (1½ or 3) MEDIEVAL CHRISTIAN CULTURE**

An examination of the religious culture of medieval Christendom from the 4th to the 15th century, with particular emphasis on such themes as the medieval papacy and the institutional Church; the evolution of monasticism, from the desert hermits of the late-antique world to the monks, nuns, and friars of the high middle ages; and expressions of spirituality in the medieval period, including pilgrimage, the Crusades, the cult of the saints, and learned piety. (Prerequisite: 236 or permission of the instructor) NO(3-0)



**HIST 380C (1½ or 3) THOUGHT AND LEARNING IN THE MIDDLE AGES**

Learned culture in medieval Europe from the late-antique period to circa A.D. 1400, emphasizing the changing social and institutional context within which medieval thought developed. Topics include the contrasting environments of cloister and school; literacy; the relationship between authority and enquiry in the middle ages; the processes by which medieval ideas were diffused. This course is historical rather than philosophical in emphasis. (*Prerequisite*: 236 or permission of instructor; PHIL 245 recommended) S(3-0)

**HIST 380D (1½ or 3) INDIVIDUAL, FAMILY AND COMMUNITY IN MEDIEVAL SOCIETY**

A seminar in medieval European social history, concentrating on the role of the individual in society, and especially the place of children, women and the aged in the community. The nature and function of marriage and the family receive particular emphasis. (*Prerequisite*: 236 or permission of the instructor.) S(3-0)

**HIST 380E (1½ or 3) MEDIEVAL FOUNDATIONS OF THE WESTERN LEGAL TRADITION**

A seminar covering the development of medieval ideas of law and the emergence of legal systems, with emphasis upon their role in the ordering of European society from the 6th to the 15th century. Special attention is paid to the major changes that took place in law and jurisprudence during the 11th and 12th centuries, a period of fundamental transformation of the medieval social, political and intellectual world. (*Prerequisite*: 236 or permission of the instructor) NO(3-0)

**HIST 381 (1½) MEDIEVAL ITALY**

A study of the Italian peninsula from the late-Roman period to circa A.D. 1400, with a particular focus on religious, cultural, and intellectual developments in Rome and Latium, Florence, Sicily, and the Lombard communes. (*Prerequisite*: 236 or permission of the instructor) NO(3-0)

**HIST 382 (1½ or 3) THE SCIENTIFIC AND INTELLECTUAL REVOLUTION OF THE 17TH CENTURY**

A survey of the rise of modern science and the new world view which resulted from its success. Among the thinkers to be considered will be Galileo, Francis Bacon, Descartes, Hobbes, Newton and Locke. These men and their ideas will be examined in the social and political context of their times. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. NO(3-0)

**HIST 383 (1½ or 3) THE ENLIGHTENMENT**

The 18th century challenge to authority; the revolutionary implications of attempts to discover scientific laws in human behaviour. The thought of the French *philosophes* will be considered together with that of other influential thinkers such as Rousseau, Hume and Adam Smith. These thinkers and their ideas will be discussed in the social and political context of their times. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. S(3-0)

**HIST 384 (1½) THE 19TH CENTURY MIND**

The Romantic reaction to the French Revolution, the role of ideologies such as liberalism, nationalism and socialism, and the impact of the theory of evolution. These movements and others will be explored in terms of their social and political background. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. NO(3-0)

**HIST 385 (1½) THE CRISIS OF MODERN THOUGHT**

A study of the role of irrationalism and relativism in the work of such thinkers as Nietzsche, Freud and Einstein. Existentialism, fascism, Keynesian economics and other responses to the cataclysmic changes of the twentieth century will also be considered in their social and political setting. The course is historical in emphasis and does not undertake literary criticism or philosophical analysis. NO(3-0)

**HIST 388 (1½ or 3) TOPICS IN EUROPEAN HISTORY**

An intensive study of selected aspects of European history. Students are advised to consult the Department for an outline of the topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department).

"Germany Since 1945"

F(3-0)

**HIST 389 (1½ or 3) SEMINAR IN EUROPEAN HISTORY**

Selected topics in European history. (Enrollment limited. Priority in registration given to honours and major students in history, but others may be admitted with consent of instructor.) (Students are advised to consult the Department about the topics to be considered.) (May be taken more than once in different topics with permission of the Chair of the Department)

F01: "The Greats in European History"

F(3-0)

F02: "Crime and Punishment: 1750-1900"

F(3-0)

**HIST 390 (3) WAR IN THE MODERN WORLD, 1755 TO THE PRESENT**

A survey of European military history from the Seven Years' War to the present day. It covers the change from the limited warfare of the early 18th century to the unlimited warfare of the 20th century. Emphasis is placed on the causes of war, the impact of new inventions on tactics and strategy, and the social, political, and economic results of wars on society up to and including the atomic age. (*Prerequisite*: 6 units of History) NO(3-0)

**HIST 392 (1½ or 3) SEMINAR IN THE HISTORY OF THE SECOND WORLD WAR**

Selected topics in the history of the Second World War. Enrollment limited. Priority in registration given to Honours and Major students in history, but others may be admitted with the consent of instructor. Students are advised to consult with Department about topics to be considered. (May be taken more than once in different topics with permission of the Chair of the Department) (*Prerequisite*: 9 units of History; 390 recommended) NO(3-0)

**HIST 393 (1½) HISTORICAL STUDY OF PEACE AND WAR**

A lecture course on selected aspects of military history and peace studies. Topics to be considered may include war and society; naval history; science, technology, and war; and the history of pacifism. (*Prerequisite*: 6 units of History; 240 and/or 390 recommended) S(3-0)

**HIST 394 (1½) SEMINAR IN PEACE AND WAR STUDIES**

Selected topics in military and peace studies. Students will be encouraged to pursue their own research interests within the confines of course topics. Topics may include: philosophers of peace and war; the social history of war, or the first world war. (May be taken more than once in different topics with permission of the Chair of the department.) (*Prerequisite*: 9 units of History, including one of 390 or 393) NO(3-0)

**HIST 395 (3) SCIENTIFIC CONSCIOUSNESS IN HISTORICAL PERSPECTIVE**

A study of the "topography" of human consciousness as it has existed in the West from archaic times to the present; particular emphasis will be placed on the scientific consciousness of the modern era. Topics include the archaic tradition; the emergence of rationalism; the Scientific Revolution and its historical impact; and the current challenges being posed to the scientific world view. NO(3-0)

**HIST 396 (1½ or 3) TOPICS IN THE HISTORY OF SCIENCE**

An intensive study of selected topics in the history of science; students are advised to consult the Department for an outline of the topics to be considered. (The course may be taken more than once in different topics with permission of the Chair of the Department.) NO(3-0)

**HIST 397 (1½) THE RISE OF DARWINIAN EVOLUTION, 1760 TO THE PRESENT**

The history of Darwinian evolution and its emergence as the unifying principle in the biological sciences. The course will examine the social context in which Darwinism emerged, the specific content of the theory, its scientific and philosophical antecedents, and the challenges that have been posed to Darwinism in recent times. (Not open to students with credit in 396 in 1983-84, 1984-85) NO(3-0)

**HIST 399 (3) THE HISTORY OF MENTALITIES**

An analysis of a number of social phenomena and their structural relationships as they have existed in Western civilization from the Middle Ages to the present; topics to be studied include suicide, addiction, creativity, romantic love, heresy and revolution. NO(3-0)



## ASIAN

**HIST 433A (1½) ANCIENT CHINA**

A study of the rise of Chinese civilization and Empire from the earliest times to approximately 200 A.D. Major themes will be the origins of Chinese civilization, the flowering of Chinese philosophy in the times of Confucius and Lao-tzu, the formation of a unified Empire, and the social foundations of the Imperial State. (*Prerequisite*: 253 or permission of the instructor) (Not open to students with credit in PACI 433A) NO(3-0)

**HIST 433B (1½) PRE-MODERN CHINA**

The development of Chinese civilization from the fall of the Han Empire in the 3rd century A.D., through the reunification of China under the Tang, to the Manchu Conquest of China in 1644. Major attention will be given to the political and social dynamics of the Imperial State and to the cultural basis of Chinese civilization. (*Prerequisite*: 253 or permission of the instructor) (Not open to students with credit in PACI 433B) NO(3-0)

**HIST 434A (1½) MODERN CHINA**

China's encounter with the modern West from the 17th century to the mid 20th century. Emphasis on the collapse of the traditional order and the search for new political, social, and cultural forms. (*Prerequisite*: 254 or permission of the instructor) (Not open to students with credit in PACI 434A) F(3-0)

**HIST 434B (1½) CHINESE COMMUNISM**

The roots of Chinese Communism and the successful implementation of a peasant-based revolution. Mao Zedong's efforts to create a radically egalitarian society after 1949; the reactions against Maoism after 1976; and China's search for a new strategy of modernization. (*Prerequisite*: 254 or permission of the instructor) (Not open to students with credit in PACI 434B) S(3-0)

**HIST 435 (1½) FEUDALISM IN JAPAN: THE WAY OF THE WARRIOR FROM THE 12TH TO THE 19TH CENTURY**

A study of politics, economics, society and culture in medieval and Tokugawa Japan with emphasis upon the role of the samurai class. (*Prerequisite*: 255 or permission of the instructor) (Not open to students with credit in PACI 435) NO(3-0)

**HIST 436A (1½) JAPAN'S MODERN TRANSFORMATION: FROM FEUDAL COUNTRY TO NATION-STATE**

An examination of a rapidly changing Japan from the time of the "opening" of the country by the Western powers in the middle of the 19th century to the time of the Pacific War and its aftermath in the middle of the 20th century. The format requires student participation such as oral presentations, written papers, and class discussion throughout the course. (*Prerequisite*: 256) (Not open to students with credit in PACI 436A) NO(3-0)

**HIST 436B (1½) 20TH CENTURY JAPAN**

A study of modern Japanese society and culture in the 20th century. Special attention will be paid to the influences of Westernization and industrialization upon traditional modes of thought, work, everyday life and creative endeavours. Changes in family life in the cities and in the countryside will be examined. (*Prerequisite*: 256) (Not open to students with credit in PACI 436B) NO(3-0)

**HIST 437 (1½) JAPANESE WOMEN FROM THE 6TH TO THE 20TH CENTURY**

A study of the history of Japanese women from the time of the ancient communities, through the golden age of classical literature, different phases of Japanese feudalism, disruptions and continuities of the post-1868 nation. The format requires student participation such as oral presentations, written papers, and class discussion throughout the course. (Not open for credit to students who have studied this topic under 438 or with credit in PACI 437) F(3-0)

**HIST 438 (3) TOPICS IN EAST ASIAN HISTORY**

An intensive study of selected aspects of East Asian history. (Students are advised to consult the Department for information regarding the subjects to be considered. May be taken for credit more than once in

different topics with permission of the Chair of the Department.) (*Prerequisite*: Relevant course work and permission of the instructor) (Not open to students with credit in PACI 438)

"Culture and Identity in Modern China"

F(3-0)

**HIST 439 (1½ or 3) SEMINAR IN EAST ASIAN HISTORY**

Selected topics in East Asian history. (Enrollment limited. Priority in registration given to Honours and Major students in history, but others may be admitted with consent of instructor. Students are advised to consult the Department about the topics to be considered. May be taken more than once in different topics with permission of the Chair of the Department) (*Prerequisite*: Relevant course work and permission of the instructor) (Not open to students with credit in PACI 439)

"Seminar in Modern Japanese History"

(3-0)

## WORLD AND COMPARATIVE HISTORY

**HIST 450 (1½) SEMINAR IN INDIAN HISTORY**

Selected topics in Indian History. (Students are advised to consult the Department for information regarding the subjects to be considered. May be taken for credit more than once in different topics to a maximum of 6 units with permission of the Chair of the Department) (*Prerequisite*: 257 or permission of instructor)

"Readings in the Indian Renaissance"

S(3-0)

**HIST 462 (HA 462) (1½; formerly 3) ART AND REVOLUTION**

Examines the role of the artist (mainly through painting and graphics) in the major social and political revolutions of modern times. Emphasis on the French, Russian and Chinese revolutions but some consideration of political art in other revolutions and movements of social protest.

NO(3-0)

**HIST 464 (1½) BRITISH COLUMBIA AND THE AMERICAN PACIFIC NORTHWEST**

A comparative examination of some of the political, economic, and cultural developments representative of the history of British Columbia and the American Pacific Northwest.

NO(3-0)

**HIST 468 (1½ or 3) TOPICS IN WORLD AND COMPARATIVE HISTORY**

Selected topics in World and Comparative history. (Students are advised to consult the Department for information regarding the subjects to be considered. May be taken for credit more than once to a maximum of 6 units in different topics with permission of the Chair of the Department) (*Prerequisite*: 105 or permission of instructor)

F01: "Oral History"

F(3-0)

S01: "The Making of the Third World"

S(3-0)

S02: "Co-operativism, Co-operatives and Economic Development"

S(3-0)

**HIST 469 (1½ or 3) SEMINAR IN COMPARATIVE HISTORY**

Selected topics in comparative history. This course will examine various themes within different historical contexts. Students are advised to consult the Department about the topics to be considered in any given year. (May be taken more than once, to a maximum of 6 units, with permission of the Chair of the Department)

"Religion and Society"

F(3-0)

## SPECIALIZED COURSES

**HIST 480 (3) APPROACHES TO HISTORY**

The history of history and the nature of history as an intellectual discipline. (*Prerequisite*: Student must be in the Honours program or have permission of the instructor) (3-0)

**HIST 481 (1½ or 3) MICRO HISTORY: THEORY AND PRACTICE FOR REGIONAL STUDIES**

A research oriented seminar examining the dimensions, possibilities and limitations of regional/local studies. (Preference given to students with at least third year standing or approval of the Department) (Not open to students with credit for this topic in 358 or 359) NO(3-0)



**HIST 490 (1½ or 3) DIRECTED READING**

Students wishing to pursue a course of directed reading should, together with a faculty member willing to supervise such a course, formulate a proposal describing both the content of the course and a suitable means of evaluating the student's work. The proposal must then receive the approval of the Chair of the Department. Students may take this course for a total of 6 units, but not more than 3 units in any given year.

**HIST 495 (3) THIRD YEAR HONOURS TUTORIAL**

Directed readings and research. Students will be required to write a research essay of 7,500-10,000 words under the direction of a member of the Department.

**HIST 496 (3) FOURTH YEAR HONOURS TUTORIAL**

Directed readings and research. Students will be required to write a research essay of 7,500-10,000 words under the direction of a member of the Department. After acceptance of the paper by the supervising faculty member the student will undergo an oral examination on the field covered in the paper.

**HIST 497 (3) HONOURS THESIS**

The preparation of an honours thesis from 15,000 to 25,000 words in length under the direction of a member of the Department. Normally, this thesis is an expansion of the student's research essay written for 495. After acceptance of the paper by the supervising faculty member, the student will undergo an oral examination on the field covered in the paper.

## HUMANITIES DIPLOMA PROGRAM

G. Kim Blank, B.A. (S. Fraser), M.A. (Wales), Ph.D. (Southampton),  
Faculty Coordinator (to 30 June 1995)

The Diploma Program in the Humanities is designed primarily for mature students who wish to explore possibilities for study in the Humanities without committing themselves to a full degree program. Candidates must have sought and obtained admission to the University. Students may complete the program on a part time basis, but must complete successfully at least 18 units of course work over a period of two to six years. Diploma students, with the guidance and assistance of a Faculty Coordinator, will arrange a program of courses organized around a particular theme or period. Students may select courses from Faculties and Divisions other than the Humanities Division, but such selection will be subject to the permissions of the departments involved and to the approval of the Faculty Coordinator. In the first year of their program they must take HUMA 100, a credit seminar, and HUMA 010, a brief noncredit orientation seminar. To remain in the program and to graduate in the program, Diploma Candidates must maintain a grade point average of at least 4.00.

Credit obtained within the Humanities Diploma Program may be transferable to a regular degree program. However, such transferability of credit is always subject to the specific requirements of the degree program.

The program is administered jointly by the Division of Humanities and by the Division of Continuing Studies. All inquiries concerning details and regulations of the program should be addressed to the Faculty Coordinator, Dr. Kim Blank, Department of English.

### COURSES

**HUMA 010 (0) DIPLOMA ORIENTATION SEMINAR**

This seminar will be taken prior to or in conjunction with Humanities 100 by all students in the Diploma Program.

**HUMA 100 (1½) AN INTRODUCTION TO HUMANITIES**

An introduction to the various ways in which scholars from different disciplines in the Humanities interpret, analyze, and evaluate texts. (Restricted to students in the Humanities Diploma Program) S(3-0)

## LIBERAL ARTS

### COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

It is recommended that students take 306 before 307. First year students may enroll only with the permission of the instructor.

**LA 306 (1½) IDEAS AND PERSPECTIVES IN WESTERN CIVILIZATION: I**

A critical interdisciplinary inquiry into some seminal ideas of western civilization and some perennial questions human beings have raised about themselves, human relationships, the social order, nature, God, and human destiny. Representative works will be drawn from literature, art, religion, philosophy, history, and social theory, from the Hellenic age to the 17th century. Texts will be studied and discussed not only as indicative of the climate of opinion of their time but also as having significance for formulating a philosophy of life. Guest lecturers from other departments will contribute, and occasionally films or slides relevant to the cultural and historical context of a work will be shown. (There are no prerequisites for the course, except that first year students may enroll only with permission of the instructor.) Texts: Sophocles, *Antigone*; selections from: Plato, *Apology*, *Crito*, *Republic*, *Phaedo*,

*Symposium*; Aristotle, *Ethics*; Vergil, *Aeneid*; The Bible; Dante, *The Divine Comedy*; Machiavelli, *The Prince*; and Pascal, *Pensées*.

NO(3-0)

**LA 307 (1½) IDEAS AND PERSPECTIVES IN WESTERN CIVILIZATION: II**

This course continues the inquiry of 306, using texts (including at least one scientific work) drawn from the 18th century to the present. Guest lecturers from other departments will contribute, and occasionally films or slides relevant to the cultural and historical context of a work will be shown. (306 is not a prerequisite for 307 though students are encouraged to follow both studies in sequence; and there are no other prerequisites, except that first year students may enroll only with permission of the instructor.) Texts: Pope, *An Essay on Man*; Goethe, *Faust* (selections); Marx, *The Economic and Philosophic Manuscripts of 1844* (selections); Darwin, *The Origin of Species* (selections); Dostoevsky, *The Grand Inquisitor* (from *The Brothers Karamazov*); Nietzsche, *Twilight of the Idols* and *The Gay Science* (selections); Freud, *Civilization and Its Discontents* (selections); Weber, *Politics as a Vocation* (selections); Sartre, *Existentialism is a Humanism*; Merleau-Ponty, *Sense and Non-Sense* (selections).

NO(3-0)

## DEPARTMENT OF LINGUISTICS

Joseph F. Kess, B.Sc. (Georgetown), M.A., Ph.D. (Hawaii), Professor and Chair of the Department

Barry F. Carlson, B.A., M.A. (Colo.), Ph.D. (Hawaii), Associate Professor

John H. Esling, B.A. (Northw.), M.A. (Mich.), Ph.D. (Edin.), Associate Professor

Thomas M. Hess, B.A. (Colo.), M.A., Ph.D. (Wash.), Associate Professor

Thomas E. Hukari, B.A. (Ore.), M.A., Ph.D. (Wash.), Associate Professor

Leslie Saxon, B.A., M.A. (Tor.), Ph.D. (Calif., San Diego), Associate Professor

James Arthurs, B.A. (Durh.), M.A. (U. of Vic.), Ph.D. (Brit. Col.), Assistant Professor

Ewa Czaykowska-Higgins, B.A. (Brit.Col.), M.A. (Tor.), Ph.D. (M.I.T.), Assistant Professor

Barbara P. Harris, B.A. (Car.), M.A., Ph.D. (U. of Vic.), Assistant Professor

Hua Lin, B.A. (Lanzhou), M.Ed., Ph.D. (U. of Vic.), Assistant Professor



Margaret Warbey, B.A. (Brit. Col.), M.A., Ph.D. (U. of Vic.), Senior Instructor

#### Visiting, Adjunct and Cross-listed Appointments:

Arthur C. Brett, B.S. (Kansas City), Ph.D. (Missouri), Adjunct Associate Professor (1994-96)

B. Craig Dickson, B.A., M.A. (U. of Vic.), Adjunct Assistant Professor (1994-96)

### GRADUATE PROGRAMS

For information on studies leading to the M.A. and Ph.D. degrees, see page 342.

### GENERAL, MAJOR AND HONOURS PROGRAMS

#### PREREQUISITE

- Except by permission of the Department, first year students may not take courses numbered 300 or higher. Courses numbered 400 or higher require at least a third year standing or permission of the Department.
- Some knowledge of a language other than English is recommended.
- Three units of introductory courses from the following list are recommended for entry into other courses: 100A and B, 360, and 362.  
N.B. A student will not be given more than three units of credit from the group of introductory courses mentioned above, e.g., credit will not be awarded for both 100A and B, and 360.
- Except for 360, 361, 362, 365, 388, 396, all courses numbered 300 and above normally have a prerequisite of a previous course in linguistics or permission of the Department.

#### B.A. in Linguistics

**General** — Students who begin the study of Linguistics as one of their fields in the General Program in their first or second year are advised to take 100A and 100B, and then at least nine units of upper level courses in Linguistics in their third and fourth years.

Students who begin the study of Linguistics as one of their fields in the General Program of their third and fourth years should take 360 or 362 and at least six other units of upper level courses in Linguistics.

**Major** — The requirements for a Major in Linguistics are 230, 250, 251, 252, and 15 units of senior courses in Linguistics including 410A, 440, and either 407 or 408.

**Honours** — Students who wish to take an Honours degree in Linguistics begin the program in the third year with the permission of the Department. Honours students must: (a) achieve at least a B average in all Linguistics courses taken in each of the third and fourth years and maintain a second class average in all work of the third and fourth years; (b) present 21 units of upper level Linguistics courses including 410A, 410B, 440, 441 and 499.

Students who meet the above requirements will be recommended for Honours degrees as follows. Successful completion of all prescribed courses together with the following graduating average: First Class Honours, 6.50 or higher, and a letter grade of at least A- in Linguistics 499 (Honours Thesis); Second Class Honours, 3.50 to 6.49, and a letter grade of at least B in 499. All Honours students are required to submit their proposals for Honours thesis research at the beginning of their final year. An Honours student with a first class graduating average, but with a grade less than A- in 499, will be given the option of receiving a Second Class Honours or a First Class Major degree.

#### B.A. in Applied Linguistics (Emphasis on teaching English as a Second Language)

##### Major

##### First and Second Years

Required Courses: 230, 250, 251, 252; 4½ units of first and second year English courses including ENGL 115; PSYC 100A/B; six units in a second language of which three units should normally be at the second year level.

##### Third and Fourth Years

Fifteen units of required courses consisting of 374, 375, 376, 388 or 389, 407 or 408, 410A, 440; including 4½ units selected from 370A, 370B, 373, 378, 386, 390, 392 or 393, 395, 397. 1½ units of this 4½ may be selected from among 340, 341, 364, 365, 396, 401, 450, 451 (15 units). 376 will normally be taken in the final year of study.

**Corequisite Courses:** Three units selected from upper level English or Creative Writing in consultation with the Department.

**Recommended Electives:** Three units selected from Education-B courses numbered 336, 342, 343, 349, 360, 361, 435, 436, 437.

#### Honours

In addition to the requirements for the Major, the Honours student must present 410B, 441, and 499 for a total of 21 units of upper level Linguistics courses. The regulations regarding the required level of achievement and the class of Honours awarded are the same as those stated above for the B.A. in Linguistics.

- Notes: 1. The B.A. degree in Applied Linguistics will prepare the individual for teaching English as a second language in many foreign countries and in Canadian programs existing outside the public school system.
2. The B.A. in Applied Linguistics does not qualify students to teach in the schools of British Columbia. Those who wish to be teachers in the British Columbia school system must either hold an Education degree or have successfully completed the professional program for graduates offered by Education faculties in the Province. (For particulars, see page 171.)

#### B.Sc. in Linguistics

##### Major

##### First and Second Years

Required Courses: 230, 250, 251, 252; either BIOL 150A/B or BIOL 207 and PE 141; MATH 100 and 101 (or 102 and 151 with permission of the Department); 3 units from PHYS 102, 120, 220; PSYC 100A/B and 201.

Recommended Electives: CSC 100, 110, 115; PE 241A and 241B (prerequisite 141); PHYS 214; PSYC 215A or 215B, 340; course(s) in a second language.

##### Third and Fourth Years

Required Courses: 370A, 370B, 380, 381, 382, 383; three units selected from 407, 408, 410A, 410B, 440, 441, and three additional units of Linguistics courses numbered upwards of 300, selected from the following: 373, 386, 396, 415, 426, 430, 482, 483, 484, 485, and from the following not already selected: 407, 408, 410A, 410B, 440, 441.

**Corequisite Courses:** PSYC 300A and 4½ units selected from PSYC 300B, 313, 315, 317A, 317B, 323, 335 or 337, 413, 415, 436, 450.

#### Honours

In addition to the requirements for the Major, the Honours students must present all of 410A, 410B, 440, 441 and 499 for a total of 21 units of upper level courses. The regulations regarding the required level of achievement and the class of Honours awarded are the same as those stated above for the B.A. in Linguistics.

Notes: 1. The B.Sc. in Linguistics is a suitable preparation for post-graduate study in the Speech and Hearing Sciences and for advanced studies in Psycholinguistics and the Phonetic Sciences.

2. A General program leading to a B.Sc. Degree is not available.

#### Diploma in Applied Linguistics (Emphasis on teaching English as a Second Language)

- Applicants must have completed a University of Victoria Bachelor's degree or its equivalent including at least 6 units of courses in English and 6 units of second language courses.
- Applicants whose previous instruction was given in a language other than English will normally be required to have a major in English.
- The program may be completed within one year of full time study, but could also be taken part time. It must be completed within five years. For part-time students, 376 will normally be taken in the final year of study.
- A minimum of 15 units of course work in addition to those credited towards a degree is required to complete the program. Applicants who have received credit for some of these courses (or equivalent) previously will be allowed to substitute up to six units of courses recommended by the Department. Students whose degrees are from universities other than the University of Victoria must complete the entire 15 units at the University of Victoria. Students with a University of Victoria degree may negotiate to have transfer credit from other universities apply to the Diploma program.



5. Courses (15 units)
  - a.) 250, 374, 375, 376, 388.
  - b.) Six units from 370A; 370B or 373; 378; 386; 389; 390 or 392; 395; 397; 260 or 261 or 340 or 341 or 364 or 365 or 396 or 401; or 7½ units including 360 or 362.
  - c.) One Education-B course: 331, 336, 342, 360, 435.
6. Those who intend to pursue an M.A. degree in Applied Linguistics should select 7½ units from section B, including 360, 361, or 362, which should be taken on entering the program, for a 16½ unit Diploma program.
7. Students who have completed the University of Victoria degree in Applied Linguistics or its equivalent may not register in the Diploma Program.
8. Those who wish to be teachers in the British Columbia school system must either hold an Education degree or have successfully completed the professional program for graduates offered by Education faculties in the province. (For particulars, see page 171).

### UNDERGRADUATE COURSES

NOTE: The following courses are acceptable for either the B.A. or the B.Sc. degree: 230, 250, 251, 252, 370A, 370B, 373, 380, 381, 382, 383, 386, 407, 408, 410A, 410B, 415, 440, 441 482, 483, 484, and 485.

Students completing first year and choosing Linguistics as a major may be interested in exploring the Arts Co-operative option. Please see page 49 for details regarding program requirements and options.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

#### LING 099 (0) ENGLISH AS A SECOND LANGUAGE (3 fee units)

A noncredit course in composition skills for students whose native language is not English — see page 13 for regulations governing such students. Final assessment will be based on the student's score on the English Placement Test written as the final exam for the course. Students who do not pass this course will be required to repeat the course in the following term. The course may be repeated for a total of four terms.

(Grading: Com, N, F) FS(3-0)

#### LING 100A (formerly half of 100) (1½) INTRODUCTION TO LINGUISTICS: I

An introduction to the subject matter of language and linguistics. Topics studied will include the nature of language through an overview of sound systems, word structures, writing systems, meaning and lexical sets, and sentence structure. (Knowledge of a language other than English not necessary) (Not open to students registered in or having credit in 360, 361, or 362)

FS(3-0)

#### LING 100B (formerly half of 100) (1½) INTRODUCTION TO LINGUISTICS: II

A more detailed examination of the topics covered in 100A as applied to the study of language in society, and language and mind. Ancillary topics include trade languages, languages of British Columbia, dialectology, language evolution, deaf communication, and language acquisition. (Prerequisite: 100A or the equivalent) (Not open to students with credit in 360, 361 or 362)

S(3-0)

#### LING 230 (1½) INTRODUCTION TO LINGUISTIC TYPOLOGY

A cross-linguistic survey of syntactic and morphological structures, and current approaches to language universals and typology. (Prerequisite: None; 100A and 100B recommended)

F(3-0)

#### LING 250 (1½) PHONETICS

An investigation of the production and nature of speech sounds commonly occurring in languages of the world. The course will provide practice in recognizing, transcribing and producing such sounds. Preliminary study of the ways in which sound systems are structured. (Prerequisite: None; 100A recommended)

F(3-0)

#### LING 251 (1½) PHONOLOGY

The course deals with the overall organization and function of sound systems, with an investigation of their variety and of the universal features which unite them. (Prerequisite: 250 or permission of the Department) (Not open to students with 3 units of credit in 250)

S(3-0)

#### LING 252 (formerly 210B; formerly half of 210) (1½)

##### INTRODUCTION TO SYNTAX

An introduction to syntactic theory and analysis. Major syntactic structures of English will be analyzed from a linguistic perspective. Analogous constructions in other languages will be examined. Additional topics may include the lexicon, the interface between morphology and syntax, and the interface between syntax and semantics. This course is prerequisite to 410A. (Prerequisite: 230)

S(3-0)

#### LING 260 (JAPA 260) (1½) INTRODUCTION TO THE JAPANESE LANGUAGE AND LINGUISTICS

A general introduction to the synchronic and diachronic descriptions of Japanese; subjects covered may include: phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Japanese, the relationship between Japanese language, thought, and culture, and the history of Japanese linguistics. (Previous knowledge of Japanese not necessary)

NO(3-0)

#### LING 261 (CHIN 261) (1½) INTRODUCTION TO THE CHINESE LANGUAGE AND LINGUISTICS

A general introduction to the synchronic and diachronic descriptions of Chinese. Subjects covered may include phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Chinese, the relationship between the Chinese language, thought, culture, and the history of Chinese linguistics.

F(3-0)

#### LING 290 (1½) WRITING SYSTEMS OF THE WORLD

Concerns the four origins of writing and subsequent evolution, the differences among logographic, syllabic and alphabetic systems, and the characteristics of a good writing system. Brief consideration is given to spelling conventions and calligraphy.

NO(3-0)

#### LING 340 (SLAV 340) (1½) INTRODUCTION TO THE SLAVIC LANGUAGES (In English)

This course will acquaint students with the family of Slavic languages, their history and place within the Indo-European language family, and their present day structure. (Prerequisite: A previous course in Linguistics or permission of the Department)

NO(3-0)

#### LING 341 (SLAV 341) (1½) SEMINAR IN A SLAVIC LANGUAGE: STRUCTURE AND HISTORY (In English)

Although designed as a continuation of 340 (SLAV 340), this course can be taken independently as well, and more than once for credit (in different languages) to a maximum of three units. This course will deal with the history and structure of a Slavic language not offered otherwise in the Department of Slavonic Studies. Depending upon demand, a different language will be treated in each given year. Languages offered at present are: Serbian, Polish, Ukrainian, Czech. (Prerequisite: A previous course in Linguistics or permission of the Department)

NO(3-0)

#### LING 360 (3) GENERAL LINGUISTICS

An introductory course intended for senior students with no previous training in the subject. The principal topics treated are phonology, morphology, and syntax in light of modern linguistic theory. (Credit will not be given for this course as well as for 100B, 361 or 362)

Y(3-0)

#### LING 361 (1½, formerly 3) ANTHROPOLOGICAL LINGUISTICS

Language in relation to culture, semantics, and as an ethnographic tool. Intended for students with no previous knowledge of Linguistics. (Not open to students who have credit in or who are taking 100B, 360, or 362) (Prerequisite: ANTH 200B)

F(3-0)

#### LING 362 (3) INTRODUCTION TO GENERAL LINGUISTICS (In French)

An introductory course for senior students with attention focused on contemporary approaches to topics such as the production and interpretation of sounds in natural languages (phonetics and phonology), structure of words (morphology), phrase and sentence structure (syntax) and aspects of meaning (semantics). Additional topics will deal with social and historical aspects of languages and their use. (Prerequisites: none; a good knowledge of oral and written French is indispensable) (Credit will not be given for this course as well as for 100A, 100B, 360 or 361)

Y(3-0)



**LING 364 (1½) LANGUAGES IN THE PACIFIC AREA**

A survey of languages spoken on the islands of the Pacific Ocean (Indonesia, Philippines, Melanesia, Micronesia and Polynesia), their genetic relationships and area groupings; specific languages and families are selected for more detailed discussion, illustrating issues of relevance in linguistic theory and analysis, applied linguistics and sociolinguistics. (*Prerequisite*: None; 100B recommended) (Not open to students with credit in PACI 364) NO(3-0)

**LING 365 (1½) SEMINAR ON A PACIFIC AREA LANGUAGE: STRUCTURE, CONTEXT AND USAGE**

This course deals each time with a different specific language spoken in Pacific Asia (except for Mandarin Chinese and Japanese) and on the Pacific Islands. Topics include phonological and grammatical structure, genetic relationships to others of its family, social and cultural context, political importance, use in the mass media and education, literature in the language, and the problems of language policy and planning. May be repeated for credit up to a maximum of six units. (*Prerequisite*: none. Not open to students with credit in PACI 365) NO(3-0)

**LING 370A (PSYC 370A) (formerly 370) (1½) PSYCHOLINGUISTICS**

Offered in collaboration with the Department of Psychology. A course in the psychology of language which examines the process of comprehension and production, including language and cognition, conversational discourse, and inference and semantics, among other topics. (*Prerequisites*: 230, 251 and 252) F(3-0)

**LING 370B (PSYC 370B) (formerly 369) (1½) DEVELOPMENTAL PSYCHOLINGUISTICS**

Offered in collaboration with the Department of Psychology. The course examines the biological bases of language; the stage by stage acquisition of the phonology, morphology, syntax, and semantics of the child's first language; and the child's developing metalinguistic abilities. Also treated are the child's growing awareness of the form and function of speech acts, as well as the discourse rules governing conversations. (*Prerequisite*: 370A) S(3-0)

**LING 372 (1½) NATIVE LANGUAGES OF BRITISH COLUMBIA**

Survey of the semantic, phonological, morphological, and syntactic structure of languages belonging to five different language families of British Columbia, and hypotheses of their history. (*Prerequisites*: 251, 252) NO(3-0)

**LING 373 (1½) SECOND LANGUAGE ACQUISITION**

The process of acquiring a second or additional language; examines the nature of learner grammars; individual differences in language acquisition; the role of input, and similarities and differences in L1 and L2 acquisition. Instructed acquisition and the relationship between acquisition research and second language teaching is also discussed. (*Prerequisite*: a previous course in Linguistics) S(3-0)

**LING 374 (1½) APPLIED LINGUISTICS**

Explores and demonstrates the relevance of theoretical linguistics, psycholinguistics, sociolinguistics and contrastive analysis to teaching and learning of language; introduction to approaches and methods in language teaching, curriculum development, error analysis, testing. (*Prerequisite*: A previous course in Linguistics or registration in Diploma in Applied Linguistics) F(3-0)

**LING 375 (1½) TECHNIQUES IN APPLIED LINGUISTICS**

With special reference to teaching English as a second language, this course addresses problems such as course design, preparation and evaluation of pedagogical materials, selection of a curriculum, construction of a syllabus and lesson plans, classroom teaching techniques, and the use of audio-visual materials. Reassessment of the theoretical principles discussed in 374. (*Prerequisite*: 374) S(3-0)

**LING 376 (1½) SEMINAR AND PRACTICUM IN APPLIED LINGUISTICS**

Seminars, workshops and lectures on contemporary issues in second language teaching and acquisition. Observation of second language classes, teaching practicum and student seminars are course core. Evaluation is based on observation logs, completion of practicum and report, and participation in seminars. Registration is limited to Applied Linguistics students. (*Pre- or corequisites*: 374, 375) Y(1-2)

**LING 378 (1½) CONTRASTIVE LINGUISTICS**

An introduction to the contrastive study of languages with respect to their phonological, morphological, syntactic and semantic systems. Special attention is also given to factors related to language learning situations, with reference to transfer and interference from the mother tongue. The language selected to be compared with English will vary from year to year. This course can be taken for credit more than once as long as the target language differs each time. (*Prerequisite*: A previous course in Linguistics) Texts: Selected readings on the theory of contrastive analysis. F(3-0)

**LING 380 (1½) ACOUSTIC PHONETICS**

A study of the acoustical properties of speech sounds including the basic physical principles involved in the generation and propagation of sound energy and the phenomenon of resonance; students are introduced to experimental instruments and trained in the use of the sound spectrograph for the analysis of speech sounds. (*Prerequisites*: 250 or equivalent) F(2-2)

**LING 381 (1½) PHYSIOLOGY OF SPEECH PRODUCTION**

A study of the physiology of the human speech mechanisms including the relevant aspects of the respiratory, laryngeal and supralaryngeal systems. (*Prerequisite*: 250) F(2-2)

**LING 382 (1½) EXPERIMENTAL PHONETICS**

This course expands on topics covered in Linguistics 380. Emphasis is placed on the design of phonetic and phonological experiments using electronic systems and introducing computer technology for speech analysis. (*Prerequisite*: 380) S(2-2)

**LING 383 (1½) AUDITORY PHONETICS**

A study of the perception of speech sounds in terms of the physiology of the organs of hearing with attention being focused on the hearing mechanism as a transducer of acoustical energy to neural impulses. Students are also introduced to speech perception research methodology. (*Prerequisite*: 250 or 251, or equivalent) S(2-2)

**LING 386 (1½) PROSODIC FEATURES OF ENGLISH**

Detailed analysis of the stress and intonation patterns of English and their relationship to grammatical functions; phonetic descriptions of rhythm and voice quality are practised and used to analyze speech in various languages. (*Prerequisite*: 250, 251, or permission of the Department) F(3-0)

**LING 388 (1½) AN INTRODUCTION TO THE GRAMMAR OF ENGLISH USAGE**

A basic functional treatment of the grammar of English, with special emphasis on standard Canadian English usage. The parts of speech and their functional relations will be examined. FS(3-0)

**LING 389 (1½) AN ADVANCED GRAMMAR OF ENGLISH USAGE**

An examination of the more complex structures of English grammar and their use as functional units at various levels of spoken and written Canadian English. Topics may include stylistic variation and the formal differences between Canadian and British or American usage. (*Prerequisite*: 388 or permission of the Department) S(3-0)

**LING 390 (1½) THE GROWTH OF MODERN ENGLISH**

The linguistic history of the English language from its Proto-Indo-European origins to the present, including non-British English (especially Canadian). Topics will include the causes of language change, the development of the phonological, morphosyntactic and lexical systems of English, and the significance of social and regional dialects. (Not open to students who have credit in ENGL 390 or 440). (*Prerequisite*: A previous course in Linguistics or permission of the Department) S(3-0)

**LING 392 (1½) CANADIAN ENGLISH**

A description of the distinctive features of modern Canadian English, especially in vocabulary, grammar and pronunciation, and an account of the economic, social, and political factors that have given rise to those features. (*Prerequisite*: A previous course in Linguistics, or permission of the Department) NO(3-0)



**LING 393 (1½) DIALECTOLOGY**

Dialect geography and its methodology with reference to English dialects including regional variation in Canada. (*Prerequisite*: A previous course in Linguistics or permission of the Department; 392 recommended) F(3-0)

**LING 395 (1½) SOCIOLINGUISTICS**

A study of language in its social context, covering aspects of linguistic variation within and across speech communities. Topics include language and class, sex, age, situation and ethnicity; languages in contact (pidgin and creole languages), codeswitching and standardization; rules of conversation and respectful address; societal features of language change. (*Prerequisite*: A previous course in Linguistics) F(3-0)

**LING 396 (JAPA 396) (1½) SOCIOLINGUISTIC ISSUES IN JAPANESE**

An examination of the Japanese language in its social context. A wide range of sociolinguistic topics will be covered, including non-verbal communication and types of Japanese spoken outside of Japan. Attention will be given to linguistic, dialectal, and stylistic variation in speech communities, and to sociolinguistic considerations such as class, gender, and social setting. NO(3-0)

**LING 397 (1½) ISSUES IN CROSS-CULTURAL COMMUNICATIONS**

Explores how 'we' view ourselves and others, as well as how others view us, enabling students to develop understanding of principles and problems involved in entering into communication with individuals from different backgrounds. Lectures, workshops and seminars help students develop appreciation of linguistic interactions, and skills necessary to eliminate the barriers created by linguistic and supra-linguistic misunderstandings. F(3-0)

**LING 401 (formerly 201) (1½) SALISH: I**

An introduction to the linguistic structures of one of the major language families in British Columbia presented through reading and translating myths and ethnographic texts of a selected member language. All texts are also presented orally. In addition to grammar and lexicon, some time is devoted to a consideration of the culture reflected in the texts. Differences between oral and written literature are also discussed. (*Prerequisite*: At least third year standing or permission of the Department) NO(3-0)

**LING 402 (formerly 202) (1½) SALISH: II**

The content of this course will vary. In some years it will involve a deeper analysis of the 401 language; in others it will be the same format as 401 presented for a second Salish language. (*Prerequisite*: 401) NO(3-0)

**LING 403 (1½) ATHAPASKAN: I**

An introduction to the linguistic structure of one of the major language families of British Columbia through the study of the historical relationships among the languages of the family and the essential characteristics of words, sound systems, sentence structure, and meaning relations in the languages. (*Prerequisites*: 251 and 252, or at least third year standing and permission of the Department) NO(3-0)

**LING 404 (1½) ATHAPASKAN: II**

Study of the structure of one Athapaskan language, or of one topic within Athapaskan linguistics. (*Prerequisite*: 403) NO(3-0)

**LING 407 (1½) LEXICAL THEORY**

Contemporary research on the syntactic and semantic properties of words, with emphasis on lexical representations and lexical rules. Topics include argument structure, thematic roles, aspect, and syntactic projection from the lexicon. (*Prerequisite*: 410A or permission of the Department) F(3-0)

**LING 408 (1½) ADVANCED MORPHOLOGY**

Survey of current theoretical models used to account for the generation of words in English and other languages. Emphasis will be on derivational morphology, especially compounding. Scope will include the role of phonology in morphological theory, the treatment of reduplication in word building, the use of rule formalisms, and the nature of lexical representations. (*Prerequisites*: 230, 251 and 252) F(3-0)

**LING 410A (1½) SYNTAX**

This course will emphasize syntactic analysis and argumentation in the description of the major structures of English using an extended phrase structure model. (*Prerequisites*: 230, 251 and 252, or Diploma status and 360) F(3-1)

**LING 410B (1½) THEORIES OF GRAMMAR**

Current issues in syntactic theory are examined from the perspective of contemporary syntactic models such as Government-Binding Theory, Head-Driven Phrase Structure Grammar, Categorical Grammar or Lexical-Functional Grammar. (*Prerequisite*: 410A) S(3-1)

**LING 415 (formerly 410C) (1½) MATHEMATICAL LINGUISTICS**

Introduction to certain formal systems relevant to theoretical linguistics. Topics include formal logic, set theory, recursive functions, and natural language quantification. (*Prerequisites*: 251 and 252) NO(3-0)

**LING 420 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS I**

An introduction to historical and comparative linguistics with a focus on the principles of sound change through time, and the methods used to study it. Examples are taken from both Indo-European and non-Indo-European languages. Topics covered include comparative reconstruction, internal reconstruction, patterns of sound change, language contact, and genetic and typological classification. (*Prerequisites*: 230 and 251, or permission of the Department) F(3-0)

**LING 425 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS II**

Continued introduction to language change focusing on morphological, syntactic and lexical change. (*Prerequisite*: 420) S(3-0)

**LING 426 (1½) SEMANTICS**

Compositional semantics. Topics include model-theoretical semantics, tense, modality, quantification, speech acts, and the interface between syntax and semantics. (*Prerequisite*: 410A or permission of the Department) F(3-0)

**LING 430 (1½) GRAMMATICAL ANALYSIS**

Generative analysis of the syntactic and morphological structure of a language other than English. (*Prerequisite*: 410A; 408 recommended) NO(3-0)

**LING 440 (1½) GENERATIVE PHONOLOGY**

Description of sound systems using procedures and theoretical bases of generative phonology. It is intended for students who have had an introduction to phonology and who wish to learn language description using distinctive sound features, notational conventions, and rule interaction formalisms. (*Prerequisite*: 251 or permission of the Department or Diploma status and 360) F(3-0)

**LING 441 (1½) ADVANCED PHONOLOGICAL ANALYSIS**

This course will survey current issues in phonological theory. Special topics, such as the question of abstractness of underlying representations, the effect of historical change on the sound component of language, the role of grammatical and lexical information in phonology, the treatment of exceptions, and the ways of handling rule interactions and applications will be considered. (*Prerequisite*: 440 or permission of the Department) S(3-0)

**LING 448 (1½) DIRECTED READINGS IN LINGUISTICS**

(Open only to Major and Honours students with a minimum G.P.A. of 6.50 in Linguistics courses) F(3-0)

**LING 449 (1½) DIRECTED READINGS IN LINGUISTICS**

(Open only to Major and Honours students with a minimum G.P.A. of 6.50 in Linguistics courses) S(3-0)

**LING 450 (1½) SEMINAR IN LANGUAGES**

An elementary analysis of a language to be selected in consultation with the Department. (*Prerequisites*: 230, 251 and 252) S(3-0)

**LING 451 (1½) SEMINAR IN LANGUAGES**

An elementary analysis of a language to be selected in consultation with the Department. (*Prerequisites*: 230, 251 and 252) NO(3-0)



**LING 482 (formerly part of 481) (1½) COMPUTATIONAL LINGUISTICS: AN INTRODUCTION**

An introduction to the applications of the computer to linguistic problems. (This course is prerequisite to 483, 484, 485) (*Prerequisite*: Written permission of the Department required for students not registered in a Linguistics degree program) F(3-0)

**LING 483 (formerly part of 481) (1½) COMPUTATIONAL LINGUISTICS: QUANTITATIVE METHODS**

The application of the computer to the analysis of linguistic data in such areas as phonetics and dialectology. (*Prerequisite*: 482. A previous course related to phonetics or dialectology recommended) S(3-0)

**LING 484 (1½) COMPUTATIONAL LINGUISTICS: GRAMMARS**

The application of computing methods to contemporary theories of natural language. (*Prerequisites*: 252 and 481 or 482) NO(3-0)

**LING 485 (1½) COMPUTATIONAL LINGUISTICS: PHONOTACTICS**

The application of phonetic and phonological theory to computerized speech synthesis and recognition. (*Prerequisites*: 382, and 482 or the equivalent of CSC 115) NO(3-0)

**LING 499 (3) HONOURS THESIS**

The Honours thesis is to be based on supervised research carried out by the student during the final year. The recommended style and format of the Honours thesis are the same as those stipulated for graduate theses. Y(3-0)

## DEPARTMENT OF MATHEMATICS AND STATISTICS

William E. Pfaffenberger, M.A., Ph.D. (Ore.), Professor and Chair of the Department

Ernest J. Cockayne, M.A. (Oxon.), M.Sc. (McG.), Ph.D. (Brit. Col.), Professor

Roger R. Davidson, B.Sc. (Queen's), M.A. (Tor.), Ph.D. (Florida St.), Professor

Albert E. Hurd, B.A., M.A. (Tor.), Ph.D. (Stan.), Professor

Reinhard Illner, Dip. (Heidel.), Ph.D. (Bonn), Professor

David J. Leeming, B.Sc. (Brit. Col.-Vic. Coll.), M.A. (Ore.), Ph.D. (Alta.), Professor

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Lowell A. Hinrichs, M.A., Ph.D. (Ore.), Associate Professor

Bruce R. Johnson, B.S., M.A., (Ore. St.), Ph.D. (Ore.), Associate Professor

Walter P. Kotorynski, B.A. (W. Ont.), M.A., Ph.D. (Tor.), Associate Professor

Donald J. Miller, B.Sc., Ph.D. (McM.), Associate Professor

Gary G. Miller, M.Sc., Ph.D. (Missouri), Associate Professor

Ian F. Putnam, B.Sc. (U. of Vic.), Ph.D. (Calif., Berk.), Associate Professor

Christopher J. Bose, B.Sc. (Brit. Col.), M.Sc., Ph.D. (Tor.), Assistant Professor

Florin N. Diacu, M.Math. (Bucharest), Ph.D. (Heidelberg), Assistant Professor

Mary Lesperance, B.A. (Windsor), B.Sc. (U. of Vic.), M.Math., Ph.D. (Wat.), Assistant Professor

Gary MacGillivray, B.Sc., M.Sc. (U. of Vic.), Ph.D. (S. Fraser), Assistant Professor

Jane (Juan-Juan) Ye, B.Sc. (Xiamen), M.B.A., Ph.D. (Dal.), Assistant Professor

M. Elizabeth Watton, B.Sc., M.Sc. (McM.), Lecturer

Charles Burton, B.A., M.B.A. (Queen's), Administrative Officer

Marilee V. Garrett, B.A. (Brown), M.Sc. (U. of Vic.), Cooperative Education Coordinator (Computer Science and Mathematics)

Megan Jameson, B.A. (U. of Vic.), Program Assistant, Cooperative Education Program

**Visiting, Adjunct and Cross-listed Appointments:**

Fausto Milinazzo, B.Sc., Ph.D. (Brit. Col.), Adjunct Professor (1994-96)

Robert F. Millar, B.A., M.A. (Tor.), Ph.D. (Cantab.), Adjunct Professor (1994-96)

Rekha Srivastava, B.Sc. (Utkal), M.Sc., Ph.D. (Banaras), Adjunct Associate Professor (1993-95)

### GRADUATE PROGRAMS

For information on studies leading to the M.A. and M.Sc. degrees, see page 344.

### LIMITATION OF ENROLLMENT

Students are advised that, because of limited facilities and staff, it may be necessary to limit enrollment in certain first and second year Mathematics and Statistics courses. Enrollment limits in second year will be imposed primarily on the basis of academic standing. Course enrollment limits will be listed during registration.

### GENERAL, MAJOR AND HONOURS PROGRAMS

**Mathematics Programs:**

For either a B.A. or B.Sc. degree in Mathematics, students may take a General, Major, Honours Mathematics or Honours Statistics program. The Mathematics/Statistics/Computer Science course requirements for each program are as follows:

**General**

- (a) 100 and 101
- (b) 205 (or 200), 201, 233A, 224 (or 233C)
- (c) 9 additional units of courses numbered 300 or higher in the Department.

**General (STATISTICS OPTION)**

- (a) 100, 101
- (b) 205 (or 200), 233A
- (c) STAT 260 (or 255), 261 (or 256)
- (d) STAT 350, 353, 354
- (e) 4½ additional units of courses chosen from STAT 450, 453, 454 (454 can be taken more than once in different topics), and other Mathematics and Statistics courses numbered 300 or higher approved by the Department.

**General (TEACHER PREPARATION OPTION)**

- (a) 100, 101, 151
  - (b) CSC 110
  - (c) 205, 224, 233A
  - (d) STAT 260
  - (e) 362, 368A
  - (f) 410, 415
  - (g) 3 additional units of courses numbered 300 or higher in the Department. Recommended courses include 324, 330A, 352, 368B, 377\*.
- \*MATH 377 requires 201 which would have to be added to the student's program.

The General Program emphasizes breadth of education and requires concentration in two different fields. See page 43 of the Calendar for more details.



**Major**

- (a) 100, 101
- (b) CSC 110, 115
- (c) 200, 201, 233A, 233C
- (d) STAT 260, 261
- (e) Two of 324, 325, 377
- (f) 330A, 330B, 333A
- (g) 7½ additional units of Mathematics and Statistics courses numbered 300 or higher (of which at least 3 units are numbered 400 or higher) chosen in consultation with the Department.

**Honours In Mathematics/Honours In Statistics**

Students who wish to be admitted to an Honours program in the Department should apply in writing to the Chair of the Department on completion of their second year. Normally a student will be admitted to the third year of an Honours program in the Department only if the student has achieved a first class average in the second year courses taken in the Department. Students are expected to receive credit for at least 7½ units in each campus term. A student whose third year work is not of honours calibre may be required to withdraw from the program. A student graduating in the Honours program will be recommended for a First Class Honours degree if the student has achieved a first class graduating average and a first class average in courses numbered 300 or higher in the Department. A student who completes the Honours degree requirements without attaining a first class standing, but with a graduating average of at least 3.50, will be recommended for a Second Class Honours degree.

**Honours In Mathematics**

- (a) 100, 101
- (b) CSC 110, 115
- (c) 200, 201, 233A, 233C
- (d) STAT 260, 261
- (e) Two of 324, 325, 377
- (f) 333A, 333C, 334, 338, 434
- (g) 12 additional units of Mathematics and Statistics courses numbered 300 or higher, of which at least 6 units are numbered 400 or higher. Students who are specifically interested in one of the areas of pure mathematics or applied mathematics should consult the Department for advice in the selection of these elective units.

**Honours In Statistics**

- (a) 100, 101
- (b) CSC 110, 115
- (c) 200, 201, 233A, 233C
- (d) STAT 260, 261
- (e) Two of 324, 325, 377
- (f) 330A, 330B (or 338), 333A, 352
- (g) STAT 350, 353, 450
- (h) Two of 452, STAT 354, 453, 454 (454 can be taken more than once in different topics)
- (i) 6 additional units of Mathematics and Statistics numbered 300 or higher. (Every program must include at least 6 units of Mathematics and Statistics courses numbered 400 or higher.)

**Combined Programs In Chemistry and Mathematics:**

For a B.Sc. degree in Combined Chemistry and Mathematics, students may take a Major or Honours program. These programs are not joint degrees in Chemistry and Mathematics, but a single degree program composed of a selected combination of courses from each of the departments. Students opting for either of these combined programs must contact the Chemistry and Mathematics and Statistics Departments, and each student will be assigned an adviser from each of these departments. Students considering proceeding to graduate work in either Chemistry or Mathematics must consult with their advisers prior to making their final choice of courses.

All Combined Chemistry and Mathematics Honours students must complete a minimum of 7½ units of courses per campus term. A student graduating in the combined Honours program is required to obtain a 6.50 or higher graduating average and a grade point average of 6.50 or higher over the group of required 300 and 400 level courses in chemistry and mathematics in order to obtain a First Class Honours degree. To obtain a Second Class Honours degree a student is required to obtain at least a 4.00 graduating average.

**First and Second Year (Major or Honours)**

|  |            |
|--|------------|
| CHEM 100 <sup>A</sup> ; or 091, 101 <sup>A</sup> ; or 140 <sup>C</sup> | (1½)       |
| CHEM 092, 102 <sup>A</sup> ; or 102 <sup>B</sup> ; or 245 <sup>D</sup> | (1½)       |
| CHEM 213, 222, 231, 235, 245   | (7½ or 6*) |
| CSC 110, 115   | (3)        |
| MATH 100, 101, 200, 201, 233A, 233C                                    | (9)        |
| PHYS 112 <sup>E</sup>  | (3)        |
| Other courses (Electives)  | (4½ or 6*) |

- <sup>A</sup> For students with Chemistry 11 and Mathematics 12 or equivalents
- <sup>B</sup> For students with Chemistry 12 and Mathematics 12 or equivalents
- <sup>C</sup> For students with at least "B" standing in Chemistry 12 and Mathematics 12 or equivalents
- <sup>D</sup> For students with at least "B" standing in CHEM 140
- <sup>E</sup> Physics requirement may also be satisfied by PHYS 120, 220
- \*If CHEM 245 completed previously instead of 102

**Third and Fourth Year (Major)**

|   |       |
|---|-------|
| (All courses listed below must be 300 level or above)   |       |
| CHEM 312/323/324/345/346/444 (or 425)/446   | (10½) |
| MATH 325/326/330A/330B/333A   | (7½)  |
| One of MATH 333C, 422, or 423   | (1½)  |
| Course chosen from the Mathematics and Statistics Department in consultation with that Department | (1½)  |
| Course(s) chosen in consultation with the Chemistry and Mathematics and Statistics Departments    | (3)   |
| Other courses (Electives)   | (6)   |

**Third and Fourth Year (Honours)**

|  |       |
|--|-------|
| (All courses below must be 300 level or above)   |       |
| All Chemistry courses listed under Major program plus  | (10½) |
| CHEM 399/499   | (4)   |
| MATH 333A/333C/334/338/434/445A/445B   | (10½) |
| Courses chosen from the Mathematics and Statistics Department in consultation with that Department | (3)   |
| Other courses (Electives)  | (3)   |

Some possible courses which might be used to fulfill the units to be chosen in the above programs are: CHEM 306; 318; 335; 337; 338; 424; 425; 444; CSC 349A; 349B; MATH 352; 368A; 368B; (for Honours, 325 and 326); STAT 353\*; 354\*.

\* These courses have 200 level statistics courses as prerequisites, which would have to be included in the student's program as options.

**Combined Programs In Computer Science and Mathematics/Computer Science and Statistics**

For a B.Sc. degree in Combined Computer Science and Mathematics or Computer Science and Statistics, students may take a Major or Honours program. These programs are not joint degrees in Computer Science and Mathematics, but a single degree program composed of selected courses from each of the departments. Students opting for any of these combined programs must contact the Computer Science and Mathematics and Statistics Departments, and will be assigned an adviser from each of these departments. Students considering future graduate work in Computer Science, Mathematics or Statistics must consult with their advisers prior to making their final choice of courses.

Students who wish to be admitted to one of the Combined Honours programs should apply in writing to the Chairs of the Departments on completion of their second year. Normally a student will be admitted to the combined Honours program only if the student meets the following conditions: completion of CSC 110, 115, 212 (formerly 112), 225, 230, and 265; completion of at least 10.5 units of the Mathematics and Statistics courses required for the degree; attainment of a grade of at least B+ in all 200 level CSC courses; attainment of a GPA of at least 6.50 in all 200 level Mathematics and Statistics courses.

Students may also apply and be admitted to one of the Combined Honours program upon completion of their third year provided:

- (i) they have completed all of the 100 level and 200 level courses required for the relevant Combined Honours degree with a GPA of at least 6.00 in these courses, and



(ii) they have completed at least 4.5 units of 300 level courses in Computer Science (including CSC 320 and 349A) and 4.5 units in Mathematics and Statistics (including MATH 333A and 334 for the mathematics option, or STAT 350 and 353 for the statistics option), and have obtained a GPA of at least 6.00 in all 300 level Computer Science, Mathematics, and Statistics courses taken.

Honours students are expected to maintain a GPA of at least 5.00 in their third year to remain in the program.

A student graduating in a Combined Honours program will be recommended for a First Class Honours degree if the student achieves a graduating average of at least 6.50. A student who does not attain a graduating average of 6.50 will be recommended for a Second Class Honours degree if the student achieves a graduating average of at least 5.00.

## COMPUTER SCIENCE AND MATHEMATICS

### First and Second Year (Major or Honours)

|                        |      |
|------------------------|------|
| MATH 100, 101          | (3)  |
| ENGL 115               | (1½) |
| ENGR 240 <sup>1</sup>  | (1½) |
| MATH 233A, 233C        | (3)  |
| MATH 200, 201          | (3)  |
| MATH 224               | (1½) |
| STAT 260, 261          | (3)  |
| CSC 110, 115           | (3)  |
| CSC 212, 225, 230, 265 | (6)  |

### Third and Fourth Year (Major)

|   |      |
|---|------|
| MATH 324, 330A, 330B  | (4½) |
| MATH 333A and one of 333C, 422, 423   | (3)  |
| CSC 320, 325, 349A, 349B  | (6)  |
| Courses chosen from the Departments of Computer Science and Mathematics and Statistics at the 300 level or above with at least 6 units at the 400 level. In selecting these courses students are urged to take at least 3 of the additional units in each of the two Departments. | (9)  |

### Third and Fourth Year (Honours)

|  |      |
|--|------|
| MATH 334, 338, 434   | (4½) |
| MATH 324, 333A, 333C   | (4½) |
| CSC 320, 325, 349A, 349B, 499  | (7½) |
| Two of CSC 425, 445, 449, 484  | (3)  |
| Courses chosen from the Departments of Computer Science or Mathematics and Statistics at the 300 level | (1½) |
| Courses chosen from the Departments of Computer Science or Mathematics and Statistics at the 400 level | (4½) |

Students must complete a minimum of 3 units of 400 level courses offered by the Department of Mathematics and Statistics as part of the above program.

## COMPUTER SCIENCE AND STATISTICS

### First and Second Year (Major and Honours)

|                                   |      |
|-----------------------------------|------|
| MATH 100, 101                     | (3)  |
| ENGL 115                          | (1½) |
| ENGR 240 <sup>1</sup>             | (1½) |
| MATH 200 (or 205), 201, 224, 233A | (6)  |
| STAT 260, 261                     | (3)  |
| CSC 110, 115                      | (3)  |
| CSC 212, 225, 230, 265            | (6)  |

### Third and Fourth Year (Major)

|   |      |
|---|------|
| MATH 324  | (1½) |
| STAT 350, 353   | (3)  |
| Three of STAT 354, 450, 453, 454  | (4½) |
| (454 can be taken more than once in different topics)   | (4½) |
| CSC 320, 325, 349A, 349B  | (6)  |
| Courses chosen from the Department of Computer Science at the 400 level   | (3)  |
| Courses chosen from the Department of Computer Science and Mathematics and Statistics at the 300 level or above.        |      |
| In selecting these courses, students are urged to take at least one additional course from each of the two Departments. | (4½) |

## Third and Fourth Year (Honours)

|   |      |
|---|------|
| MATH 324  | (1½) |
| STAT 350, 353, 450  | (4½) |
| Three of MATH 452, STAT 354, 453, 454   | (4½) |
| (454 can be taken more than once in different topics)   | (4½) |
| CSC 320, 325, 349A, 349B, 499   | (7½) |
| Two of CSC 425, 445, 446, 449, 484  | (3)  |
| Courses chosen from the Departments of Computer Science and Mathematics and Statistics at the 300 level or above.       |      |
| In selecting these courses, students are urged to take at least one additional course from each of the two Departments. | (4½) |

<sup>1</sup> ENGL 225 can replace ENGR 240 but this requires 3 units of first year English as prerequisite.

## Honours in Physics and Mathematics

Admission to the third and fourth years of the Honours Program in Physics and Mathematics requires the permission of both the Department of Physics and Astronomy and the Department of Mathematics and Statistics. The class of the Honours degree of a student graduating in the Honours in Physics and Mathematics Program will be determined on the basis of the grade point average calculated using the best 30 units of approved 300 and 400 level courses. The class designated will be First Class if this average is at least 6.50 and Second Class if this average is at least 3.50.

In year 1 students will take (a) PHYS 120 and 220 or (b) PHYS 112. In each case the student will then choose subsequent courses indicated by the appropriate letter (a) or (b).

### Year I

|  |      |
|--|------|
| (a) PHYS 120, 220; or  | (3)  |
| (b) PHYS 112   | (3)  |
| 3 units of Chemistry   | (3)  |
| MATH 100, 101  | (3)  |
| MATH 233A, 233C*   | (3)  |
| CSC 110  | (1½) |
| (Students who believe that they have the equivalent of CSC 110 may request the Physics and Astronomy and Mathematics and Statistics Departments to waive the CSC 110 requirement.) |      |

### Year II

|                      |      |
|----------------------|------|
| (a) PHYS 216 or      | (1½) |
| (b) PHYS 220 and 216 | (3)  |
| PHYS 214 and 215     | (3)  |
| MATH 200 and 201     | (3)  |
| MATH 233A and 233C*  | (3)  |

### Year III

|                    |      |
|--------------------|------|
| PHYS 325 and 326   | (3)  |
| PHYS 321A and 321B | (3)  |
| PHYS 413A and 413B | (3)  |
| MATH 325 and 326   | (3)  |
| MATH 334 and 338   | (3)  |
| MATH 434           | (1½) |
| MATH elective**    | (1½) |

### Year IV

|                     |           |
|---------------------|-----------|
| PHYS 317□           | (1½)      |
| PHYS 410 and 421    | (3)       |
| PHYS 422 and 423    | (3)       |
| PHYS 460            | (0)       |
| PHYS electives**    | (1½ or 3) |
| MATH 333A and 333C* | (3)       |
| MATH 445A and 445B  | (3)       |
| MATH electives**    | (3)       |

\* MATH 233A and 233C may be taken in first year, in which case 333A and 333C may be taken in second year.

□ PHYS 317 may be taken in second year if 220 is taken in first year.

\*\* Mathematics electives are to be chosen in consultation with the Department of Mathematics and Statistics, and Physics electives are to be chosen in consultation with the Department of Physics and Astronomy. Students will normally enroll in 18 units of work in each of third and fourth years.



**Notes**

1. All students taking a Major or Honours in Mathematics are strongly advised to take at least one University course in Physics.
2. Any students who demonstrate to the Department that they have mastered the material of a course may be granted advanced placement. For this purpose a score of 4 or 5 on the AP Calculus test will constitute mastery of Mathematics 100.
3. Students from outside British Columbia, transfer students from community colleges and students who have obtained credit for Grade XIII Mathematics must consult the Department before enrolling in any Mathematics course.
4. Students with lower than B standing in Mathematics 12 are advised to take Mathematics 120 before attempting Mathematics 100.

**MATHEMATICS COOPERATIVE EDUCATION PROGRAM**

The Cooperative Education Program in the Faculty of Arts and Sciences is described on page 43. Additional general regulations pertaining to Cooperative Education Programs of the University of Victoria are found on page 38.

Full time students in the Cooperative Education Program participate in a combined Mathematics and Computer Science Cooperative Program during their first two years. In their third year, students may opt to complete a degree program in either Computer Science or Mathematics, and will then enter the Coop program in that department. Students who opt for the Major or Honours in Combined Computer Science and Mathematics, or for a Double Major or Double Honours in Computer Science and Mathematics, will remain in the combined Computer Science/Mathematics Coop Program.

The minimum academic requirements for entering the Mathematics and Computer Science Program are a grade point average of 4.50, a minimum grade point average of 5.50 in courses completed in the Departments of Computer Science and Mathematics and Statistics and a grade of at least B- in each course completed in the Departments of Computer Science and Mathematics and Statistics. Students are normally admitted to the Program in January, after the first term on campus, and application for admission should be made before the end of the first term. First year students wishing to apply for entry to the program should enroll in Mathematics 100 and 101, Computer Science 112 and 115, and Statistics 260.

In order to graduate in the Mathematics Cooperative Program or the combined Mathematics and Computer Science Cooperative Program students must:

- (i) successfully complete a minimum of four Work Terms. (The granting of Work Term credit by challenge is not permitted.)
- (ii) satisfy the course requirements of any of the Major or Honours degree programs offered by the Department of Mathematics and Statistics.

Students registered in the Coop Program must be enrolled in at least 6 units of course work during each campus term. The performance of students will be reviewed after each Campus Term and each Work Term. Students whose performance is deemed to be unsatisfactory by the Computer Science and Mathematics Coop Committee may be required to withdraw from the program.

Each Work Term is recorded on the student's academic record and transcript (as COM, N or F) and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

Further information concerning the Cooperative Education Program in Mathematics may be obtained from the Department.

**Notes:**

- (A) Each student who is admitted to the Coop program during first year of University must complete all five scheduled Work Terms.
- (B) Students who transfer from other institutions and all students admitted to the Coop Program in their second year of University must complete at least four Work Terms and must complete all scheduled Work Terms in their program.

**UNDERGRADUATE COURSES**

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

**MATHEMATICS**

Students should consult the Department concerning courses offered in any particular year.

**MATH 100 (1½) CALCULUS: I**

Review of analytic geometry; functions and graphs; limits; derivatives; techniques and applications of differentiation; antiderivatives; the definite integral and area; logarithmic and exponential functions; trigonometric and hyperbolic functions. (*Prerequisite:* Mathematics 12 or its equivalent) (Not open to students with credit in 102) (See Notes 2 and 4 above) FS(4-0)

**MATH 101 (1½) CALCULUS: II**

Volumes; arc length and surface area; techniques of integration with applications; Newton's method, trapezoidal and Simpson's rules; polar coordinates and area; l'Hospital's rule; Taylor's formula; improper integrals; series and tests for convergence; power series and Taylor series. (*Prerequisite:* 100 or equivalent) FS(4-0)

**MATH 102 (1½) CALCULUS FOR STUDENTS IN THE SOCIAL AND BIOLOGICAL SCIENCES**

Calculus of one variable with applications to the social and biological sciences. Exponential growth. (*Prerequisite:* Mathematics 12 or its equivalent) (Not open to students with credit in 100.) FS(3-0)

**MATH 103 (formerly part of 240) (1½) MATHEMATICS FOR ECONOMICS: I**

Elements of matrix algebra, partial derivatives, unconstrained and constrained optimization with economics examples, infinite series. (*Prerequisite:* 100 or 102) S(3-0)

**MATH 120 (formerly MATH 012) (1½) PRECALCULUS MATHEMATICS**

The essential topics prerequisite for Mathematics 100 and 102. Elementary functions with emphasis on the general nature of functions; polynomial, rational, exponential, logarithmic, and trigonometric functions. Conic sections, plane analytic geometry. (*Prerequisite:* Mathematics 11 or equivalent) (Not intended for students who are proficient with the topics covered in Mathematics 12. Not open to students who have completed or are currently registered in 100 or 102) (See Note 4 above) FS(4-0)

**MATH 133 (1½) MATRIX ALGEBRA FOR ENGINEERS**

Complex numbers; matrices and basic matrix operations; vectors; linear equations; determinants; eigenvalues and eigenvectors; linear dependence and independence; orthogonality. (*Prerequisite:* Admission to a B.Eng. program) (Not open to students with credit in 110 or 233A) F(3-0-1)

**MATH 151 (1½) FINITE MATHEMATICS**

Geometric approach to linear programming, linear systems, Gauss-Jordan elimination, matrices, compound interest and annuities, permutations and combinations, basic laws of probability, conditional probability, independence, urn problems, tree diagrams and Bayes formula, random variables and their probability distributions, Bernoulli trials and the binomial distribution, hypergeometric distribution, expectation, applications of discrete probability and Markov chains. (*Prerequisite:* Mathematics 12 or equivalent, or MATH 120, which may be taken concurrently) (Students who have credit for 352 may not register in 151 for credit.) FS(3-0)

**MATH 160A (formerly half of 160) (1½) MATHEMATICS FOR THE ELEMENTARY TEACHER: I**

Sets, functions, and logic; whole numbers, divisibility, and elementary number theory; the integer, rational, and real number systems together with associated algorithms. (*Prerequisite:* Mathematics 11 or equivalent or consent of the Department) (Credit granted only toward a degree in Elementary Education) FS(3-0)

**MATH 160B (formerly half of 160) (1½) MATHEMATICS FOR THE ELEMENTARY TEACHER: II**

Ratio, percent and interest; measurement and the metric system; elementary geometry, symmetry, congruence and similarity; probability. (*Prerequisite:* Mathematics 11 or equivalent, or consent of the Department. Normally 160A is taken before 160B) (Credit granted only toward a degree in Elementary Education) FS(3-0)



**MATH 200 (1½) CALCULUS OF SEVERAL VARIABLES**

Vectors and vector functions; solid analytic geometry; partial differentiation; directional derivatives and the gradient vector; Lagrange multipliers; multiple integration with applications; cylindrical and spherical coordinates; surface area; line integrals; Green's Theorem. The section of this course for engineering students will also cover the following topics: surface integrals and the divergence theorem. (*Prerequisite:* 101) FS(3-0-1)

**MATH 201 (1½) INTRODUCTION TO DIFFERENTIAL EQUATIONS**

Principally a first course in ordinary differential equations. First order equations; geometric interpretation; direction fields and integral curves; applications to the physical and biological sciences; linear equations of higher order; solutions of constant coefficient equations and their application to vibration problems; nonlinear second order equations and examples; the phase plane. The Laplace transform and applications. Singular points and global behaviour of some examples. (*Prerequisite:* 101) FSK(3-0-1)

**MATH 203 (formerly part of 240) (1½) MATHEMATICS FOR ECONOMICS: II**

Elements of multivariable integral calculus, complex numbers, difference and differential equations with economics applications, linear programming. (*Prerequisite:* 103) (Not open to students with credit for 200, 201, or 205) F(3-0)

**MATH 205 (1½) MULTIVARIABLE CALCULUS**

Vectors in two and three dimensions, vector-valued functions, functions of several variables, multivariate differential calculus, multiple integrals. (*Prerequisite:* 101) (Intended primarily for Biochemistry/Microbiology, Chemistry, Earth Sciences, and Mathematics General students. Not intended for Mathematics Major or Honours or Statistics Honours students. Credit can be obtained for only one of 200, 205) S(3-0-1)

**MATH 224 (1½) LOGIC AND FOUNDATIONS**

Set theory, functions, relations, partial orderings, equivalence relations and partitions, connectives and truth tables, quantifiers, number of ways of arranging  $n$  items, number of ways of selecting  $r$  items out of  $n$ , methods of proof including mathematical induction, trees, graphs, asymptotic notation, exact and asymptotic solutions of recurrence relations, properties of integers. (*Prerequisite:* 100 or 102 or 151 or permission of the Department) (Not open to students with credit for 222 or 422 or 423) FSK(3-0)

**MATH 233A (1½) MATRIX ALGEBRA: I**

Matrices: simultaneous equations; determinants; vectors in 2-, 3- and  $n$ -tuple space; inner product; linear independence and rank; change of coordinates; rotation of axes in 2- and 3-dimensional Euclidean space; orthogonal matrices; eigenvalues and eigenvectors. (*Prerequisite:* 3 units of 100 level mathematics courses; or an A grade in Mathematics 12 or equivalent) (Not open to students with credit in 133) FS(3-0)

**MATH 233B (1½) MATRIX ALGEBRA: II**

Eigenvalues, eigenvectors and diagonalization of complex matrices with applications; orthogonal and unitary matrices; positive definite matrices with applications. (*Prerequisites:* 100 or 102, and 233A or 133) (Not open to students with credit in 333C) (This course is intended primarily for second year physics students or other science students with a strong mathematical background.) K(3-0)

**MATH 233C (1½) INTRODUCTION TO ALGEBRA**

The integers, induction, factorization, congruences. Definition and examples of rings, fields and integral domains. Rational numbers, real numbers, complex numbers. Polynomials and their factorization. Permutations; definition and examples of groups. Additional topics chosen from Boolean algebras and lattices; transfinite arithmetic. (*Prerequisite:* 233A or 110 or 133, and a grade point average of at least 3.00 in all 200 level mathematics and statistics courses completed) (This course is intended primarily for Mathematics students.) S(3-0)

**MATH 242 (1½) MATHEMATICS OF FINANCE**

Compound interest and annuities-certain; analysis of securities, yield rates; equations of value; mortgages, amortization, sinking funds; depreciation, depletion and capitalization costs; mortality tables, life insurance and annuities. (*Prerequisite:* 102 and 151, or 101 and some knowledge of probability) (Not open to students with credit for 152) S(3-0)

Students with a D grade in Second Year Mathematics courses are advised not to register for further courses in Mathematics.

**MATH 321 (1½) DIFFERENTIAL EQUATIONS FOR ENGINEERS**

An introduction to methods for solving partial differential equations: basic concepts; derivation of the heat and wave equations (heat transfer, vibrations of membranes and strings); classification of second order partial differential equations; separation of variables; Fourier series solution; eigenfunction space, Bessel and Legendre functions; introduction to numerical methods. Optional topics: systems of ordinary differential equations, classical and direct methods in the calculus of variations. (*Prerequisites:* 200 and 201, and admission to the Faculty of Engineering (Not open to students with credit in 323B or 326) NO(3-0)

**MATH 323 (formerly 323A) (1½) APPLIED DIFFERENTIAL EQUATIONS**

A brief review of the material covered in 201. Series solutions of selected second order differential equations with variable coefficients with special emphasis on Bessel's and Legendre's equations. Linear systems of differential equations. The application of the Laplace transforms for systems. Numerical methods with applications. Some qualitative results. (Primarily for students in the physical sciences) (*Prerequisites:* 200 (or 205), 201) (Credit can be obtained for only one of 323, 323A, 325. This course cannot in general be included as part of the Mathematics and Statistics Department's requirements for the Major or Honours degree) F(3-0)

**MATH 324 (1½) DISCRETE AND COMBINATORIAL MATHEMATICS**

Graphs: trees, colouring, planarity, Hamilton and Euler cycles, network flows and matching. Counting: permutations, combinations with and without repetitions, binomial and multinomial theorems, inclusion-exclusion. Generating functions: manipulation of formal power series, exponential generating function, partitions of integers. Recurrence relations: linear recurrences, nonhomogeneous recurrences, method of generating functions, divide and conquer recurrences. Inference rules and laws of logic, basics of discrete probability. (*Prerequisite:* 224 or 233A or permission of the Department) (Not open to students with credit for 222 or 422 or 423) FSK(3-0)

**MATH 325 (1½) INTERMEDIATE ORDINARY DIFFERENTIAL EQUATIONS**

Series solutions of linear ordinary differential equations about ordinary and regular singular points, Euler's, Bessel's and Legendre's equations. Numerical methods with applications. The general theory of linear systems of equations. Laplace transform for systems. Stability theory, Liapunov functions. Other qualitative results and methods. (*Prerequisites:* 200, 201, 233A or equivalent. *Corequisite:* 330A or 334) (Credit can be obtained for only one of 323, 323A, 325) F(3-0)

**MATH 326 (1½) INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS**

Partial differential equations in physics (wave, heat and Laplace equations), solution by separation of variables, boundary value problems, orthogonal functions, Fourier series, transform methods (Laplace and Fourier transforms), numerical methods. (*Prerequisite:* 323, 323A or 325) (Credit can be obtained for only one of 323B, 326) SK(3-0)

**MATH 330A (1½) ADVANCED CALCULUS**

Sequences and series of real numbers; sequences and series of real valued functions; uniform convergence; Fourier series; differentiation and integration of series of real valued functions; power series; Taylor series; Taylor's formula with remainder; multivariate calculus; implicit function, Stokes and divergence theorems. (*Prerequisites:* 200 or 205) (Not open to students who have credit for 334) F(3-0)

**MATH 330B (1½) INTRODUCTION TO COMPLEX VARIABLES**

An introduction to the theory of functions of a complex variable, analytic functions, elementary functions, integration, power series, residue theory. (*Prerequisite:* 330A) (Not open to students who have credit for 338) SK(3-0)



**MATH 333A (1½) ABSTRACT ALGEBRA: I**

Groups, rings and fields, including quotient structures. (*Prerequisite:* 233C or permission of the Department) F(3-0)

**MATH 333C (1½) LINEAR ALGEBRA**

Vector spaces and linear transformations; the canonical forms; inner product spaces and the spectral theorem. (*Prerequisite:* 233C or 233B or 210) S(3-0)

**MATH 334 (1½) FOUNDATIONS OF ANALYSIS**

Sets and functions, the real number system, set equivalence, sequences and series, introduction to point set and metric topology, limits and continuity in metric spaces. (Primarily for Honours students. Not open to students who have credit for 430) (*Prerequisites:* 200 and 201 and the consent of the Department) F(3-0)

**MATH 338 (1½) INTRODUCTION TO COMPLEX ANALYSIS**

Elementary functions of a complex variable, analytic functions, differentiation and integration of functions of a complex variable, power series and residue theory. (Primarily for Honours students. Not open to students who have credit for 330B) (*Prerequisite:* 334) SK(3-0)

**MATH 352 (1½) INTRODUCTION TO PROBABILITY**

Probability spaces, combinatorial analysis, conditional probability, independence, inclusion-exclusion, random variables, expectation, discrete and continuous distributions, limit theorems. (*Prerequisite:* 200 or 205, or 240) F(3-0)

**MATH 362 (1½) ELEMENTARY NUMBER THEORY**

Divisibility, primes, congruences, arithmetic functions, primitive roots, quadratic residues, basic representation and decimals, and a selection from the following topics: Pythagorean triples, representation as sums of squares, infinite descent, rational and irrational numbers, distribution of primes. (For Mathematics Majors and Honours students, and for students planning to teach mathematics in secondary schools) (*Prerequisite:* 3 units of 200 level mathematics courses) F(3-0)

**MATH 368A (1½) EUCLIDEAN GEOMETRY**

The real affine and projective planes; Euclidean geometry; modern elementary geometry; elementary transformations; Euclidean constructions; the fundamental theorem of polygonal dissection; projectivities; proper conics. (*Prerequisite:* At least six units of mathematics or the consent of the Department) (Not open to students with credit for 366) F(3-0)

**MATH 368B (1½) NON-EUCLIDEAN GEOMETRY**

The parallel postulate; hyperbolic geometry; elliptic geometry; double elliptic geometry; the Poincaré model. (*Prerequisite:* At least six units of mathematics or the consent of the Department) S(3-0)

**MATH 377 (1½) MATHEMATICAL MODELLING**

The formulation, analysis and interpretation of mathematical models in various areas of application. Both continuous and discrete deterministic and stochastic models will be employed. Mathematical techniques used may include: differential and difference equations, matrix analysis, optimization, simple stochastic processes, decision theory, game theory and numerical methods. The phenomena modelled may vary from year to year. (*Prerequisites:* 200 (or 205), 201, 233A, and one of STAT 250, 254, 255, 260) S(3-0)

**NOTE: Admission to the following courses is by permission of the instructor or the Department.**

**MATH 410 (1½) INTRODUCTION TO MODERN ALGEBRA FOR TEACHERS**

Development of the number systems of elementary algebra; groups, rings, integral domains and fields; polynomials. (*Prerequisites:* 224 and 233A, or permission of the Department) (Cannot be used to satisfy mathematics unit requirements for any Major or Honours degree offered by the Department. Not open to students with credit in 233C or 333A) (Not offered in even-numbered years, e.g. 96W session) F(3-0)

**MATH 415 (1½) HISTORY OF MATHEMATICS**

Survey of the development of Mathematics from its earliest beginnings through to the present. (*Pre- or corequisite:* 333A or 410 or consent of the Department) S(3-0)

**MATH 422 (1½) COMBINATORIAL MATHEMATICS**

Permutations and combinations, generating functions, recurrence relations, inclusion-exclusion principle. Mobius inversion, Polya's enumeration theorem. Ramsey's theorem, systems of distinctive representatives, combinatorial designs, algorithmic aspects of combinatorics. (*Prerequisite:* 324; 333A, which may be taken concurrently) F(3-0)

**MATH 423 (1½) GRAPH THEORY**

An introduction to the combinatorial, algorithmic and algebraic aspects of graph theory. (*Prerequisite:* 324) S(3-0)

**MATH 433C (1½) ABSTRACT ALGEBRA: II**

Field theory; composition series of groups; Galois Theory. (*Prerequisites:* 333A, and 333C or 333B) NO(3-0)

**MATH 433D (1½) APPLIED ALGEBRA**

A survey of the applications of algebraic structures in computer science, applied mathematics, and electrical engineering. Topics to be covered include: switching circuits, finite state machines, state diagrams, machine homomorphism, group and matrix codes. Optional topics include Polya-Burnside enumeration, Latin squares, primality testing. (*Prerequisite:* 333A) NO(3-0)

**MATH 434 (formerly 336) (1½) REAL ANALYSIS: I**

Theory of differentiation; Riemann-Stieltjes integration; Fourier series; functional analysis. (Primarily for Honours students) (*Prerequisite:* 334) S(3-0)

**MATH 435 (1½) REAL ANALYSIS: II**

Lebesgue measure and integration. The  $L_p$  spaces. Introduction to Hilbert and Banach spaces. (Primarily for Honours students) (*Prerequisite:* 434 or 336 or the consent of the Department) F(3-0)

**MATH 445A (1½) ADVANCED ORDINARY DIFFERENTIAL EQUATIONS**

Existence and uniqueness results. Continuous dependence on initial data. Dynamical systems; local and global theory. Bifurcation theory. Attractors. Sturm-Liouville theory. Other topics as time permits. (*Prerequisites:* 434 or 336 or the consent of the Department) F(3-0)

**MATH 445B (1½) ADVANCED PARTIAL DIFFERENTIAL EQUATIONS**

The Cauchy-Kovalevskaya theorem; geometric theory of first order partial differential equations; well-posed problems; elliptic equations; semigroups. (*Prerequisite:* 434 or 336 or consent of the Department) S(3-0)

**MATH 452 (1½) STOCHASTIC PROCESSES**

Introduction to the branch of probability theory which deals with the mathematical analysis of systems that evolve in time while undergoing chance fluctuations. Main topics include random walks, Markov chains, Poisson processes, birth and death processes, renewal theory. Examples illustrate wide applicability of stochastic processes in many branches of science and technology. (*Prerequisite:* 352 or STAT 350) S(3-0)

**MATH 462 (1½) NUMBER THEORY**

A selection of topics which may include compositions and partitions, geometry of numbers, rational approximation, distribution of primes, order of magnitude of arithmetic functions, proofs of the Prime Number Theorem and of Dirichlet's Theorem on primes in arithmetic progressions, continued fractions. (*Prerequisites:* Grade of B- or higher in 362, and consent of the instructor) NO(3-0)

**MATH 465 (1½) INTRODUCTION TO TOPOLOGY**

Basic concepts of point set topology. (*Prerequisite:* 334, which may be taken concurrently, or 330A or the consent of the Department) (May be offered only in alternate years) S(3-0)



**MATH 468 (1½) TOPICS IN GEOMETRY**

Appropriate topics may be selected from among the following: finite Desarguesian spaces; symmetry geometry; polyhedra; geometric designs and tactical configurations; axiomatics. Since the same topic will not be offered in two successive years, the course may be repeated for credit. (*Prerequisite*: 368A or the consent of the Department) NO(3-0)

**MATH 490 (1½ or 3) DIRECTED STUDIES IN MATHEMATICS**

Students must consult the Department before registering. This course may be taken more than once in different fields with permission of the Chair of the Department. NO

**MATH 491A (1½) TOPICS IN APPLIED MATHEMATICS**

Through this course the Department offers advanced topics in various areas of applied mathematics. Possible topics include population modeling, stochastic processes, discrete optimization, actuarial mathematics, calculus of variations, and fluid mechanics. Information on the topics available in any given year will be available from the Chair of the Department. Entry to this course will be restricted to third or fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with permission of the Chair of the Department.

Topics to be determined

NO(3-0)

**MATH 491B (1½) TOPICS IN PURE MATHEMATICS**

Through this course the Department offers advanced topics in various areas of pure mathematics. Possible topics include advanced complex analysis, functional analysis, introduction to manifolds, introduction to differential geometry, and mathematical logic. Information on the topics available in any given year will be available from the Chair of the Department. Entry to this course will be restricted to third or fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with permission of the Chair of the Department.

Topics to be determined

Y(1½-1½)

**STATISTICS****STAT 252 (1½) STATISTICS FOR BUSINESS**

Descriptive statistics; graphics; modelling and statistical inference for comparing samples from two populations, simple and multiple regression, time series models and contingency tables; introduction to designed experiments. Examples will be taken from business applications. Students will be expected to analyze data using computing facilities. (*Prerequisites*: MATH 151 and admission to the Bachelor of Commerce program) (Credit will not be given for both 252 and any of 255, 256, 260, or 261) (See Credit Limit, page 18) S(3-0)

**STAT 254 (1½) PROBABILITY AND STATISTICS FOR ENGINEERS**

Probability axioms, properties of probability, counting techniques, conditional probability, independence, random variables, discrete and continuous probability distributions, expectation, variance; binomial, hypergeometric, negative binomial, Poisson, uniform, normal, gamma and exponential distributions; discrete and continuous joint distributions, independent random variables, expectation of functions of random vectors, covariance, random samples and sampling distributions, central limit theorem; point and interval estimation for one and two sample problems; linear regression and correlation. (*Prerequisite*: Admission to a B.Eng. program. *Corequisite*: MATH 200) (Credit can be obtained for only one of 250, 254, 255, 260) (See Credit Limit, page 18) K(3-0-1)

**STAT 255 (1½) STATISTICS FOR LIFE SCIENCES: I**

Descriptive statistics; probability; random variables and probability distributions; expectation; binomial, Poisson, and normal distributions; random sampling and sampling distributions; point and interval estimation; classical hypothesis testing and significance testing. Statistical examples and applications from life sciences will be emphasized. (*Prerequisite*: At least one university level mathematics course) (Intended primarily for Biochemistry/Microbiology, Biology, Environmental Studies, Health Information Science and Kinesiology students. Credit

will not be given for both 255 and any other beginning level statistics course offered by any academic unit) FS(3-0)

**STAT 256 (1½) STATISTICS FOR LIFE SCIENCES: II**

Estimation and hypothesis testing; analysis of variance and the design of experiments; regression and correlation; analysis of categorical data; distribution-free procedures. Statistical examples and applications from life sciences will be emphasized. (*Prerequisite*: 255 or equivalent) (Intended primarily for Biochemistry/Microbiology, Biology, Environmental Studies, and Health Information Science students. Credit can be obtained for only one of 251, 256, 261) (See Credit Limit, page 18) FS(3-0)

**STAT 260 (1½) INTRODUCTION TO PROBABILITY AND STATISTICS: I**

Descriptive statistics; elementary probability theory; random variables, discrete and continuous probability distributions, expectation, joint, marginal and conditional distributions; linear functions of random variables; random sampling and sampling distributions; point and interval estimation; classical hypothesis testing and significance testing. The mathematical foundations of statistical inference will be introduced and illustrated with examples from a variety of disciplines. (*Pre- or corequisite*: MATH 101 or 240) (Credit can be obtained for only one of 250, 254, 255, 260) (See Credit Limit, page 18) FS(3-0)

**STAT 261 (1½) INTRODUCTION TO PROBABILITY AND STATISTICS: II**

Estimation and hypothesis testing; normal sampling distribution theory; analysis of variance and the design of experiments; regression and correlation; analysis of categorical data; distribution-free procedures. The mathematical foundations of statistical inference will be introduced and illustrated with examples from a variety of disciplines. (*Prerequisite*: 260 or equivalent) (Credit can be obtained for only one of 251, 256, 261) (See Credit Limit, page 18) S(3-0)

**STAT 350 (1½) MATHEMATICAL STATISTICS: I**

Discrete and continuous probability models, random variables and their distributions, mathematical expectation, moment generating functions, sums of random variables, limit theory, and sampling distributions. Emphasis on the probability theory needed for 450. (*Prerequisites*: MATH 200 (or 205) and one of 251, 256, 261) F(3-0)

**STAT 353 (1½) APPLIED REGRESSION ANALYSIS**

An outline of linear regression theory with applications. (*Prerequisite*: 256, 261, or consent of the instructor) S(3-0)

**STAT 354 (1½) SAMPLING TECHNIQUES**

Principal steps in planning and conducting a sample survey. Sampling techniques including stratification, systematic sampling and multistage sampling. Practical survey designs with illustrations. Nonsampling errors. (*Prerequisite*: 256, 261, or permission of instructor) F(3-0)

**STAT 450 (formerly 351) (1½) MATHEMATICAL STATISTICS: II**

Brief introduction to decision theory, point and interval estimation, hypothesis testing; regression and correlation, analysis of variance. Emphasis on the mathematics of statistics. (*Prerequisite*: 350) S(3-0)

**STAT 453 (1½) THE DESIGN AND ANALYSIS OF EXPERIMENTS**

An introduction to the principles of experimental design and the techniques of analysis of variance. A discussion of experimental error, randomization, replication, and local control. Analysis of variance is developed for single factor and multifactor experiments. The use of concomitant observations. Multiple comparisons and orthogonal contrasts. (*Prerequisites*: One of 251, 256, 261; and 353 or some experience or familiarity with experimentation) F(3-0)

**STAT 454 (1½) TOPICS IN APPLIED STATISTICS**

Possible topics include: Multivariate analysis, multidimensional scaling methods, clustering methods, and time series analysis. Information on the topics available in any given year may be obtained from the Chair of the Department. This course may be taken more than once in different topics with permission of the Chair of the Department. (*Prerequisites*: 353 and the consent of the instructor) S(3-0)



## MEDIEVAL STUDIES

Director: John L. Osborne, B.A. (Car.), M.A. (Tor.), Ph.D. (Lond.), Professor (History in Art)

### *Medieval Studies Program Committee:*

Elena Rossi, B.A. (Vassar), M.A., Ph.D. (Tor.), Associate Professor, Department of Hispanic and Italian Studies. Term expires July 1, 1996

John H. Tucker, B.A., M.A. (Tor.), B.Lit. (Oxon.), Ph.D. (Tor.), Associate Professor, Department of English. Term expires July 1, 1996

Catherine D. Harding, B.A. (McG.), Ph.D. (Lond.), Assistant Professor, Department of History in Art. Term expires July 1, 1995

Nancy Micklewright, B.A., M.A., Ph.D. (Penn.), Visiting Assistant Professor, Department of History in Art. Term expires July 1, 1995

Medieval culture, which flourished in Europe from about A.D. 300-1500, and has analogues in many non-European cultures, lends itself well to interdisciplinary study. Since a proper understanding of the life of the Middle Ages requires a knowledge of the history and thought of the period, the Medieval Studies Program seeks to train students in the techniques of history, literature, language and manuscript studies needed for the accurate and critical study of medieval culture. A Major program is available, as well as a General program. Students may also undertake the Major in Medieval Studies together with a Major program in another department (see Double Major, page 42), or with a Major in another Faculty (see Interfaculty Double Major, page 43). These programs lead to a bachelor's degree. A General Program leading to a bachelor's degree is also offered. By completing the requirements for the General Program together with a Major or Honours Program in another department or faculty, students may obtain a Minor (see Minor and Interfaculty Minor, page 43). Students interested in pursuing a program in Medieval Studies should consult with the program Director.

### GENERAL PROGRAM

The General Program consists of 301 and 302 and an additional six units of medieval courses at the 300/400 level to be approved by the Director of the Medieval Studies Program. Students on a General Program or those wishing to combine a Medieval Studies Minor with a Major or Honours Degree must select their courses from areas outside their field of concentration.

#### **Suggested Courses**

ENGL 340 (1½) Introduction to Old English  
 ENGL 341 (1½) Old English Literature  
 ENGL 346 (1½) Introduction to Old Icelandic  
 ENGL 347 (1½) Old Icelandic Literature  
 ENGL 351 (1½) The Canterbury Tales  
 ENGL 352 (1½) Chaucer Studies  
 ENGL 353 (1½) Studies in Medieval English Literature  
 ENGL 354 (1½) Old and Middle English Literature in Translation  
 ENGL 357 (1½) The Poetry of the Alliterative Revival  
 ENGL 440 (1½) History of the English Language  
 FREN 425 (3) History of the Language  
 FREN 440 (1½ or 3) Medieval Literature  
 FREN 441 (MEDI 441) (1½) Medieval Arthurian Romance  
 GER 403 (1½) Evolution of the German Language  
 GER 411 (1½) Medieval German Literature  
 SPAN 470A (1½) Early Medieval Literature  
 SPAN 470B (1½) Late Medieval Literature  
 SPAN 490A (1½) History of the Spanish Language  
 ITAL 470 (1½) Dante's Divine Comedy (in English)  
 ITAL 472 (1½) Petrarch and Boccaccio (in English)  
 HIST 320 (1½) Medieval England  
 HIST 380 (1½) Problems in Medieval Europe  
 HIST 380A (1½ or 3) Medieval Christian Culture  
 HIST 380B (1½ or 3) Thought and Learning in the Middle Ages  
 HIST 380C (1½ or 3) Individual, Family and Community in the Middle Ages

HIST 380D (1½ or 3) Medieval Foundations of the Western Legal Tradition

HIST 381 (1½) Medieval Italy

H A 321 (1½) Late Classical and Early Christian History in Art

H A 323 (1½) Byzantine History in Art

H A 326 (1½) Early Medieval History in Art

H A 328 (1½) Gothic Art and Architecture

H A 340A (1½) The 15th Century in Northern Europe

H A 352 (1½) Genesis of Islamic Art and Architecture

H A 354 (1½) Medieval Islamic Art and Architecture

H A 357 (1½) Amirates and Sultanates of the Muslim Mediterranean

H A 420 (3) Special Studies in Medieval Art

H A 450 (1½ or 3) Topics in Islamic Art and Civilization

MUS 311 (3) Music of the Medieval Period and the Renaissance

THEA 307 (1½) Studies in Medieval Theatre

#### **Recommended Background and Comparative Courses**

The study of classical culture provides an excellent background for Medieval Studies. Also, since medieval culture has a number of analogues in non-European cultures, comparisons are fruitful. The following courses might make interesting electives for Medieval Studies students.

ANTH 300A (1½) Kinship and Marriage

ANTH 300B (1½) Comparative Social Structure

ANTH 300C (1½) Complex Societies in Cross Cultural Perspective

ANTH 304 (1½) Technology in Culture

ANTH 305 (1½) Anthropology of the Arts

ANTH 306 (1½) Folklore and Mythology

ANTH 310 (1½) Anthropological Approaches to Comparative Religion

ANTH 332 (1½) Ethnology of Europe

CLAS 300 (1½) Classical Epic

CLAS 301 (1½) Tradition and Originality in Classical Literature

CLAS 322 (1½) Greek and Roman Drama

CLAS 335 (1½) Women and the Family in Classical Antiquity

CLAS 340 (3) Roman History

CLAS 345 (1½) Slavery in the Roman World

CLAS 346 (1½) Roman Law and Society

CLAS 372 (H A 317) (1½) Art and Architecture of the Roman World

CLAS 375 (1½) Cities and Sanctuaries of the Ancient World

CLAS 376 (1½) Ancient Science and Technology

CLAS 381 (1½) Ancient Religions

CLAS 480 (1½) Seminars in Ancient History and Archaeology

LATI 300 (3) Latin Language and Literature: II

LATI 390 (1½) Latin Authors

LATI 400 (3) Latin Language and Literature: III

ENGL 409 (1½) The Bible in English

ENGL 410 (3) Backgrounds to English Literary Traditions

PACI 433B (HIST 433B) (1½) Pre-Modern China

PACI 435 (HIST 435) (1½) Feudalism in Japan: The Way of the Warrior from the 12th to the 19th Century

JAPA 302B (1½) Japanese Literature in Translation: The Middle Ages and the Early Modern Period (1185-1867)

PHIL 421 (1½) Plato

PHIL 422 (1½) Aristotle

H A 358 (1½) Islam and Asia

H A 371 (1½) Early Chinese Art

H A 373 (1½) Early Japanese Art and Architecture

H A 451 (1½) Islamic Architecture

Students, especially those considering graduate studies in this field, are urged to take advantage of the Latin courses offered by the Classics department. Also recommended are HIST 236 (Medieval Europe) and PHIL 245 (Medieval Philosophy).



### Combined Medieval Studies Minor and English Honours

Students in the Medieval Studies Program who are enrolled also in the English Honours Program may earn a Combined English Honours and Medieval Studies Minor degree. To do so they must complete MEDI 301 and MEDI 302, together with 3 units selected from the Medieval courses (apart from English courses) which are included in the list of suggested courses for the Medieval Studies Program. In addition they must satisfy their English Honours (e)\* requirement and 1½ units of their (k)\* requirement with courses from the following list: 340, 341, 346, 347, 352, 353, 354. (See page 86.)

\* (e) At least 1½ additional units from the period before 1660: 340, 341, 346, 347, 352, 353, 354, 359, 360, 361, 362, 363, 364, 369, 410.

\* (k) Electives: at least 4½ units (or 6 units, if English 360 has been taken instead of 366) from English Department courses numbered 300 and above.

### MAJOR PROGRAM

Prerequisites for the Major

At least second year standing or permission of the Director of Medieval Studies; HIST 236 Medieval Europe (3) recommended.

Requirements for the Major

(1) MEDI 301 The Middle Ages: I (1½ units)

MEDI 302 The Middle Ages: II (1½)

MEDI 450 Introduction to Manuscript Studies (3)

(2) Majors are required to take a total of 9 units at the senior level (300 or above), made up of 3 units selected from each of THREE participating departments, which may include Medieval Studies. Courses will be selected from the list of SUGGESTED COURSES above, in consultation with the program Director, and may include MEDI 401.

(3) Language Requirements: Before graduation each Student will be required to demonstrate a reading knowledge of a language other than English appropriate to the area of special interest. Normally this requirement will be satisfied by completion of a 200 level language course with at least second class standing. (French 180 is also acceptable.) \* In special circumstances, permission may be sought to take a translation examination administered by the Program.

\* NOTE: This may include ENGL 340, 341, 346, 347, but the same courses cannot be counted again under Major requirements.

TOTAL: 15 units

### COURSES

(Course offering codes: Y=Sept.-Apr., F=Sept.-Dec., S=Jan.-Apr., K=May-Aug., NO=Not offered, this session)

#### MEDI 210 (1½) VOICES FROM THE MIDDLE AGES

Medieval writers speak to us in many voices, and in many modes: male and female, ecclesiastical and secular, serious and comic or fantastic, prose and verse. In this course a selection of medieval texts will be studied in English translation. The focus each year will be on a different theme. Theme for 1995-96: Love in the Middle Ages. (May be taken more than once to a maximum of 3.0 units) S(3-0)

## DEPARTMENT OF PACIFIC AND ASIAN STUDIES

Joe B. Moore, B.A. (Wyo.), M.A. (Calif.-Berk.), Ph.D. (Wis.), Associate Professor and Chair of the Department

Daniel J. Bryant, B.A. Ph.D. (Brit. Col.), Associate Professor

Hsin-i Hsiao, B.A., (Tunghai), M.A., Ph.D. (Harv.), Associate Professor

Richard King, B.A., M.A. (Cantab.), Ph.D. (Brit. Col.), Associate Professor

Yuen-Fong Woon, B.A., M.A. (H.K.), Ph.D. (Brit. Col.), Associate Professor

Michael Bodden, B.A., M.A., Ph.D. (Wis., Madison), Assistant Professor

Helen R. Chauncey, B.A., M.A., Ph.D. (Stan.), Assistant Professor

R. Christopher Morgan, B.A., M.A. (U. of Vic.), Ph.D. (A.N.U.), Assistant Professor

#### MEDI 301 (1½) THE MIDDLE AGES: I

An interdisciplinary introduction to the Middle Ages. The origins of medieval civilization and the development of its characteristic institutions until about A.D. 1200 will be examined through a study of the art, society, and history of Europe in this period. Comparable developments in the East will also be considered. (Prerequisite: At least second year standing or permission of the Director of Medieval Studies; HIST 236 recommended) F(3-0)

#### MEDI 302 (1½) THE MIDDLE AGES: II

An interdisciplinary introduction to the later Middle Ages. The flowering and dissolution of medieval culture between about A.D. 1200 and 1500 will be explored in the art, thought, and history of Europe during these centuries. (Prerequisite: At least second year standing or permission of the Director of Medieval Studies; HIST 236 recommended) S(3-0)

#### MEDI 350 (LATI 350) (1½) MEDIEVAL LATIN (formerly MEDI 250)

After an introduction to medieval Latin grammar, the course will explore the varied tradition of medieval Latin literature, from St. Augustine's *Confessions* to Petrarch's letters, from theological discourses to drinking and love songs, from crusade chronicles to ghost stories. Passages will be read and discussed in the context of medieval culture and society. Students with credit in LATI 250 cannot receive credit for MEDI 350. (Prerequisite: LATI 200 or equivalent) (3-0)

#### MEDI 401 (1½) SELECTED TOPICS IN MEDIEVAL CULTURE

An interdisciplinary investigation of a selected topic in the evolution of medieval culture, with an emphasis to be placed on the artistic, intellectual, or spiritual life of the time. (May be taken more than once in different topics for a maximum of 6 units) (Prerequisite: At least second year standing or permission of the Director of Medieval Studies; MEDI 301 and 302 recommended) Topic for 1995-96: Filming the Middle Ages. S(3-0)

#### MEDI 441 (FREN 441) (1½) MEDIEVAL ARTHURIAN ROMANCE

Origins and evolution of Medieval Arthurian romance through an examination of representative texts. The language of instruction is English. Students enrolled in MEDI 441 must submit all written assignments in English; students enrolled in FREN 441 must submit all written assignments in French. S(3-0)

#### MEDI 450 (3) INTRODUCTION TO MANUSCRIPT STUDIES

An introduction to basic paleographical and codicological techniques, as well as to the history of scripts, and a survey of the methods manuscript specialists use to address questions of the audience, reception and function of medieval books and documents. Issues to be studied may include: literacy, multi-lingualism, patronage, book production and the book trade, censorship, the relation between text and image, the transmission of classical texts, the scribal practices of scriptoria and chanceries. (Prerequisite: Permission of the instructor) (Team-taught) Members of the Program Y(3-0)

#### MEDI 490 (1½ or 3) DIRECTED STUDIES

(Available to Medieval Studies majors in their final year. May be taken more than once to a maximum of 3.0 units) (Prerequisite: Permission of the Program Director)

Hiroko Noro, B.A., M.A. (Aoyama Gakuin), Ph.D. (Tor.), Assistant Professor

M. Cody Poulton, B.A., M.A., Ph.D. (Tor.), Assistant Professor

Peter Vandergest, B.Sc. (Wat.), M.S., Ph.D. (Corn.), Assistant Professor

B. Morgan Young, B.A. (Alta.), M.A., Ph.D. (Brit. Col.), Assistant Professor

Yasuko France, B.A. (Toyo), M.Ed. (Mass.), Senior Instructor

#### Visiting, Adjunct and Cross-listed Appointments:

James A. Boutilier, B.A. (Dal.), M.A. (McM.), Ph.D. (Lond.), Adjunct Professor (1994-95)



- Michiko Aramaki, B.A. (Osaka), M.A. (Tsukuba), Visiting Assistant Professor (1994-95)
- Kate G. Frieson, B.A., M.A. (Brit. Col.), Ph.D. (Monash), Visiting Assistant Professor (1994-95)
- Nozomi Riddington, B.A. (Tokyo Women's Christian), M.A., M.F.A. (Mass.), Visiting Lecturer (1994-95)
- Karen Kai-Ying P. Tang, B.A. (National Taiwan Normal U.), M.A. (Brit. Col.), Visiting Lecturer (1994-95)
- Harumi Terada, B.A. (Seinan Gakuin), M.Ed. (Ore. State), Visiting Lecturer (1994-95)

## LIMITATION OF ENROLLMENT

Students are advised that because of limited staff and facilities it may be necessary to restrict enrollment in some courses in Chinese, Japanese, Southeast Asian Studies or Pacific Studies programs.

Students who wish to repeat a course at any level will be given lower priority than students taking the course for the first time.

For admission to most language courses numbered 100B, 150 or above, a minimum grade of B, or in some cases higher, in the prerequisite course is required. As language courses are limited to 25 students per section, the department reserves the right to rank students according to their grades for the prerequisite course.

### Placement Tests for Transfer Students

Although transfer students may be given credit for language courses taken at their previous institution, they will not be guaranteed admission to more advanced language courses in this department.

Prior to registration, all transfer students who wish to continue their language studies will be required to take a placement test in order to determine the level at which they should register.

## PACIFIC STUDIES PROGRAM

The Interdisciplinary Pacific Studies Program is designed to provide a concentration to be used for both general education and professional purposes. Its initiation stems from Canada's rapidly developing interest in the Pacific area, the location of Victoria in relation to the Pacific and a recognition that Canadians need to know more about the region.

The programs in Pacific and Asian Studies stress the development of analytical and critical faculties, as well as academic skills such as research and writing. Like all undergraduate programs in the Humanities Division, they are not aimed at providing students with vocational training or specific job skills. What the programs do provide is basic communication skills in Chinese, Japanese, or Indonesian; an appreciation of the culture, literature, theatre, and other arts of the Pacific and Asian region; and a knowledge of the history, economy, societies, and politics of the area. Such general skills and specialized knowledge, especially when combined with the expertise offered by programs such as Education, Law, Business, Public Administration, or Environmental Studies, should enhance the opportunities of students seeking careers related to the Asia-Pacific region.

The Department offers both general and major programs in Pacific Studies. All majors must at the beginning of the third year complete a program planning form for the Pacific Studies Program Advisor (available from the Departmental office) and consult her/him if there is a specific problem in course selection.

### GENERAL IN PACIFIC STUDIES

#### Requirements:

- First and Second Years*  
PACI 200A/B (3)  
PACI 290 (or equivalent) (1½)  
6 units of one of Chinese, Japanese or Indonesian language. (Courses in other Pacific and Asian languages may be acceptable.) (6)

#### *Third and Fourth Years*

- Any three out of four sequences listed below:  
PACI 319A/B, 321A/B, 323A/B, 328A/B (9)  
6 units of electives (No consultation necessary) (6)  
Of these 15 units, each of the following regions must be covered by at least 1½ units: Japan, China, Southeast Asia, Pacific Islands

## MAJOR IN PACIFIC STUDIES

The Major in Pacific Studies is subdivided into three area concentrations: a) China, b) Japan, c) Oceania-Southeast Asia. For the Oceania-Southeast Asia concentration, 6 units of language training are required; for each of the China and Japan concentrations, 9 are required and 12 are strongly recommended. Students taking a major program in Pacific Studies cannot simultaneously obtain a minor degree in the same area as their concentration for the major. The requirements for these three area concentrations are as follows:

### a) China concentration:

- First and Second Years*  
CHIN 100A/B, 200; or 149, 150 (6)  
PACI 200A/B (3)  
PACI 290 (1½)

#### *Third Year*

- CHIN 300 or 310 (3)  
PACI 319A/B, plus (3)  
One of the following sequences:  
PACI 321A/B, 323A/B, 328A/B (3)

#### *Fourth Year*

- A China or Taiwan seminar (chosen from PACI 417, 420, CHIN 305, 306) (1½)  
A 400 level seminar on Oceania, Japan, or Southeast Asia (1½)  
3 units of directed studies or special topics chosen from PACI 480, 490, CHIN 480, 490 (Consult Program Adviser) (3)

### b) Japan concentration:

- First and Second Years*  
JAPA 100A/B, or 101 or 149 (3)  
JAPA 200 or 150 (3)  
PACI 200A/B (3)  
PACI 290 (1½)

#### *Third Year*

- JAPA 300 or 311 (3)  
PACI 321A/B, plus (3)  
One of the following sequences:  
PACI 319A/B, 323A/B, 328A/B (3)

#### *Fourth Year*

- A Japan seminar (chosen from PACI 422, 440 JAPA 303A, 303B, 320A, 320B, 400, 411) (1½)  
A 400 level seminar on China, Oceania, or Southeast Asia (1½)  
3 units of directed studies or special topics chosen from PACI 480, 490, JAPA 480, 490 (Consult Program Adviser) (3)

### c) Oceania-Southeast Asia concentration:

#### *First and Second Years*

- SEA 100A/B, 200 (This requirement can be fulfilled by other Southeast Asian or Oceanic languages, Proficiency in university-level French, Dutch, or Spanish may be acceptable) (6)  
PACI 200A/B (3)  
PACI 290 (1½)

#### *Third Year*

- Three units of:  
SEA 302, LING 360, 361, 364 or 365, PACI 325 or 390 (3)  
PACI 323A/B or PACI 328A/B, plus (3)  
One of the following sequences:  
PACI 319A/B, 321A/B, 323A/B, 328A/B (3)

#### *Fourth Year*

- An Oceania or Southeast Asia seminar (chosen from PACI 410, 412, 413, 414, 425) (1½)  
Another 400 level seminar on China, Japan, Southeast Asia or Oceania (1½)  
3 units of directed studies or special topics chosen from PACI 480, 490, SEA 480 (Consult Program Adviser) (3)



## RELATED COURSES

The following courses have significant Pacific and Asian content and are highly recommended as electives to students in this program. Students must ensure that they have the prerequisites stipulated for these courses.

- ANTH 326 (1½) Ethnology of Oceania: Micronesia and Polynesia  
 ANTH 327 (1½) Ethnology of Oceania: Australia and Melanesia  
 ANTH 329 (1½) Ethnology of Southeast Asia  
 ECON 324 (1½) Economic Development in Southeast Asia  
 ECON 328 (1½) The Economic Development of Japan, Korea and Taiwan  
 ECON 428 (1½) The Postwar Japanese Economy  
 GEOG 442 (1½) Geography of Chinatowns and Chinese Migration  
 GEOG 447 (1½) Urban Problems of Pacific Rim Developing Countries  
 GEOG 464A (1½) Physical and Cultural Geography of China  
 GEOG 464B (1½) Political and Economic Geography of China  
 GEOG 465 (3) Geography of Japan  
 GEOG 467 (1½) Geography of Southeast Asia  
 H A 333 (1½) Art and Architecture of Southeast Asia  
 H A 359 (1½) Islamic Art and Architecture in Southeast Asia  
 H A 371 (1½) Early Chinese Art  
 H A 372 (1½) Later Chinese Art  
 H A 373 (1½) Early Japanese Art  
 H A 374 (1½) Later Japanese Art  
 H A 431 (1½) Modern Art in Indonesia  
 H A 433 (1½) Images of and by Women in Southeast Asian Art  
 HIST 253 (1½) Introduction to Chinese Civilization  
 HIST 254 (1½) China and the West  
 HIST 255 (1½) Introduction to Japanese Civilization before the Nineteenth Century  
 HIST 256 (1½) Introduction to Modern Japan  
 HIST 433A (1½) Ancient China  
 HIST 433B (1½) Pre-Modern China  
 HIST 434A (1½) Modern China  
 HIST 434B (1½) Chinese Communism  
 HIST 435 (1½) Feudalism in Japan: The Way of the Warrior from the 12th to the 19th Century  
 HIST 436A (1½) Japan's Modern Transformation: From Feudal Country to Nation-State  
 HIST 436B (1½) 20th Century Japan  
 HIST 437 (1½) Japanese Women from the 6th to the 20th Century  
 HIST 438 (1½) Topics in East Asian History  
 HIST 439 (1½) Seminar in East Asian History  
 LING 364 (1½) Languages in the Pacific Area  
 LING 365 (1½) Seminar on a Pacific Area Language: Structure, Context and Usage  
 POLI 303 (1½) Political Thought in East Asia  
 POLI 318 (1½) Government and Politics in East Asia  
 POLI 416 (1½) State, Revolution and Reform in East Asia

## PACIFIC STUDIES COOPERATIVE EDUCATION PROGRAM

The Pacific Studies Cooperative Education Program is administered under the Arts Cooperative Education Program (see Calendar page 49). Entry into this particular program is restricted to students who are enrolled in a Major Program in Pacific Studies. Students undertake their first work term after completion of second year, and are required to complete a minimum of four work terms. To be admitted and to continue in the Pacific Studies Cooperative Education Program, students must maintain a 6.50 average in Pacific and Asian Studies courses, with a 5.00 grade point average overall. A student may withdraw from the program and graduate in the regular Pacific Studies Major Program.

## CURRICULUM

Students must fulfill all of the requirements both of the Pacific Studies Major Program and of the Arts Cooperative Education Program. The following points arising from the scheduling of work terms should be noted:

- Coop students may take PACI 490 (or CHIN 490 or JAPA 490) either as a 3 unit course or as two 1½ unit courses separated by a work term.
- Coop students are encouraged to complete all full year courses as early as possible in their program. Note in particular that most language courses are offered only on a full year basis.

## PROGRAM IN CHINESE STUDIES

### GENERAL

First Year: CHIN 100A/B or 149

Second Year: CHIN 200 or 150

Third and Fourth Years: 300 or 310, plus six additional units of courses numbered 300 or above related to China. Students eligible for placement in 420 may count it in place of 300 toward their General program.

## PROGRAM IN JAPANESE STUDIES

### GENERAL

First Year: 3 units of 1st year Japanese chosen from JAPA 100A/B, 101, or 149

Second Year: JAPA 200 or 150

Third and Fourth Years: JAPA 300 or 311 plus 6 additional units of courses numbered 300 or above related to Japan and chosen in consultation with the Program Adviser.

## PROGRAM IN SOUTHEAST ASIAN STUDIES

### GENERAL

First Year: SEA 100A/B

Second Year: SEA 200, 201

Third and Fourth Years: 302 plus 7½ additional units of courses chosen from SEA 480, PACI 323A/B, 412, 425, ANTH 329, ECON 324, H A 333, 359, 431, 433.

## COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### CHINESE

Native speakers of Chinese (Mandarin) may not obtain credit for 100A/B, 149, 150, 200, 300, 310, 400 or 480, but may be allowed to take 490 for credit. A native speaker is defined in this context as a person who has spoken some form of Chinese since childhood and who has received sufficient instruction in Chinese to be literate in the Chinese script. Students who are not native speakers, but who have some knowledge of a form of Chinese other than Mandarin (e.g. Cantonese) will be placed at an appropriate level; however, such students may, at the instructor's discretion, be required to withdraw or to transfer to a higher level course should their language proficiency prove greater than was initially supposed.

### CHIN 100A (formerly half of 100) (1½) INTRODUCTION TO CHINESE: I

Foundation work on the sounds of Modern Standard Chinese (Mandarin), using GR romanization. Introduction of some basic vocabulary and sentence structures. (Limited to 25 students per section. Not open to students with credit in 149 or equivalent) F(3-1)

### CHIN 100B (formerly half of 100) (1½) INTRODUCTION TO CHINESE: II

Additional basic vocabulary and sentence structures. Introduction of Chinese characters in standard (traditional) forms. (Prerequisite: 100A or equivalent. Limited to 25 students per section. Not open to students with credit in 149 or equivalent) S(3-1)



**CHIN 149 (3) INTENSIVE CHINESE: I**

Intensive Chinese language instruction for beginning language students. Equivalent to 100A/B but covered in one term. (Limited to 25 students per section. Not open to students with credit in 100A and/or 100B)

F(6-2)

**CHIN 150 (3) INTENSIVE CHINESE: II**

Continuation of 149 for those students who intend to practise their listening comprehension, speaking and reading abilities, and writing skills on a more advanced level. The content of 150 is comparable to that of 200. (Prerequisite: normally a minimum final grade of B in 149 or equivalent; limited to 25 students per section) (Not open to students with credit in 200)

S(6-2)

**CHIN 200 (3) SECOND YEAR CHINESE**

A sequel to 100B. More advanced grammar and idioms; additional vocabulary and characters. (Prerequisite: normally a minimum final grade of B in 100B or equivalent. Limited to 25 students per section. Not open to students with credit in 150)

Y(3-1)

**CHIN 201A (formerly part of 201) (1½) ASPECTS OF CHINESE CULTURE: I**

A survey of cultural development of the Han Chinese from earliest times to the mid nineteenth century. Philosophy, religion, literature, technology and the arts will be the most important areas of discussion. Relevant political, economic and social background will also be introduced. No knowledge of Chinese language is required. (Prerequisite: None, not open to students with credit in 201)

F(3-0)

**CHIN 201B (formerly part of 201) (1½) ASPECTS OF CHINESE CULTURE: II**

A survey of Chinese culture from the mid nineteenth century to the present. Contemporary culture patterns will be placed in traditional perspective, while relevant political, economic and social contexts will also be considered. The effects of modern events on cultural life, particularly literature, the arts, religion and education system will be emphasized. (Prerequisite: 201A or permission of the instructor. Not open to students with credit in 201)

S(3-0)

**CHIN 202 (formerly 302) (3) INTRODUCTION TO CHINESE LITERATURE, IN TRANSLATION**

A survey of Chinese literature in the 'classical' language from early times to the end of the 19th century, with emphasis on poetry. While the course will be concerned chiefly with the literary interest of the works to be discussed, relevant social and historical backgrounds will be introduced as appropriate.

NO(3-0)

**CHIN 261 (LING 261) (1½) INTRODUCTION TO THE CHINESE LANGUAGE AND LINGUISTICS**

A general introduction to the synchronic and diachronic descriptions of Chinese. Subjects covered may include phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Chinese, the relationship between the Chinese language, thought, culture, and the history of Chinese linguistics.

F(3-0)

**CHIN 300 (3) INTERMEDIATE MODERN CHINESE**

A sequel to 150 or 200. Primary emphasis on reading and translation of texts in modern Chinese in both standard and simplified characters. Introduction of elements of the classical language as used in modern writing. Attention also to listening, speaking and/or writing skills. (Prerequisite: normally a minimum final grade of B in 150 or 200 or equivalent. Limited to 25 students per section)

Y(3-0-1)

**CHIN 303 (formerly 303B) (1½) TOPICS IN CHINESE THOUGHT: CONFUCIANISM**

An analysis of selected topics in Confucianism, with emphasis on the interpretation of controversial issues in Confucian thought. Among the areas to be discussed are: 1) current official interpretations of Confucianism, 2) the anti-Confucian movement during the May Fourth period, 3) early Confucianism vs. state Confucianism, 4) the cultivation of sagehood in neo-Confucianism, 5) Confucianism and traditional Chinese political culture, 6) contemporary reinterpretation of Confucianism. This course will be taught in English. (Prerequisite: Second year standing or permission of the instructor)

S(3-0)

**CHIN 304 (1½) MASTERWORKS OF CHINESE FICTION**

Survey of the Chinese tradition of fiction with concentration on the great novels of the Ming and Qing, notably *Outlaws of the Marsh*, *Journey to the West*, *The Story of the Stone*, and *The Scholars*. Western and traditional Chinese views of fiction writing derived from commentaries on the great novels. All readings are in English translation; Chinese texts for most of the readings will be available.

NO(3-0)

**CHIN 305 (1½) MODERN CHINESE LITERATURE AND SOCIETY (1900-1949)**

After a historical overview and a criticism workshop, the course will consist of a study of selected literary texts from late Qing and Republican China. The development of modern Chinese literature will be traced in novels of exposure written at the turn of the century, through the short stories of the May Fourth period, to works of fiction and drama written in the 1930's and 1940's. There will be supplementary readings in social and political history and literary criticism. The course will be taught in English. (Prerequisite: Second year standing or permission of the instructor)

NO(3-0)

**CHIN 306 (1½) THE LITERATURE OF THE PEOPLE'S REPUBLIC OF CHINA (1949 TO THE PRESENT)**

A study of Chinese literary texts written in a range of forms and styles during the period of communist rule and covering such important issues as the social position of women, land ownership, modernization of industry, and the treatment of intellectuals. The course will be taught in English. (Prerequisite: Second year standing or permission of the instructor)

NO(3-0)

**CHIN 310 (3) INTRODUCTION TO LITERARY CHINESE**

Introduction to the grammar of the classical literary language of China; readings from such early writers as the philosopher Mencius, the historian Ssu-ma Ch'ien, and the T'ang poet Wang Wei. (Prerequisite: 300 or first class standing in 150 or 200, or permission of the instructor) (Not open to native speakers)

Y(3-0)

**CHIN 400 (3) ADVANCED READINGS IN MODERN CHINESE**

A sequel to 300. Reading of materials in Modern Chinese at a more advanced level. Opportunity will be provided for practice in conversation. The content of 400 will vary from year to year. (May be taken more than once in different topics with the permission of the Chair of the Department) (Students may not obtain credit for more than 6 units of 400) (Prerequisite: normally a minimum final grade of B in 300 or equivalent; limited to 25 students per section)

Y(3-0)

**CHIN 420 (3) MANDARIN FOR SPEAKERS OF OTHER CHINESE LANGUAGES**

Intended for literate speakers of non-Mandarin forms of Chinese, such as Cantonese, Hakka, etc. Development of speaking ability in Mandarin through the reading and discussion of selected Chinese literary works which will vary from year to year. (May be taken more than once in different topics to a maximum of 6 units with the permission of the Program Adviser) (Prerequisites: Reading knowledge of Chinese and permission of the instructor)

Y(3-0)

**CHIN 480 (1½ or 3) DIRECTED READINGS IN CHINESE**

A seminar intended for advanced students prepared to read extensively in Chinese. Readings in Chinese and English will be assigned by the instructor in consultation with participating students. (May be taken more than once with the permission of the instructor and the Chinese Program Adviser. Students wishing to substitute this course for CHIN 490 or PACI 490 for the Pacific Studies graduating requirement must obtain prior approval from the Pacific Studies Program Adviser) (Prerequisite: CHIN 400 or equivalent; grade of A- or better in 300 or 310 plus enrolment in 400) (Not open to native speakers)

Y,F,S

**CHIN 490 (1½ or 3) DIRECTED STUDIES**

This course will normally involve readings and a research project in a particular area of Chinese Studies in which the student is qualified. The individual program of studies will be supervised by an appropriate faculty member. (May be taken more than once for credit in different topics up to a maximum of 6 units) (Normally open only to students who satisfy the requirements for PACI 490)

Y,F,S



## JAPANESE

Native speakers of Japanese may not obtain credit for 100A/B, 101, 149, 150, 200, 300, 311, 400, 411 or 480, but may be allowed to take 490 for credit. A native speaker is defined in this context as a person who has spoken Japanese since childhood and who has received sufficient instruction to be literate in Japanese. Students who are not native speakers, but who do have some knowledge of Japanese, will be placed at an appropriate level; however, such students may, at the instructor's discretion, be required to withdraw or to transfer to a higher level course should their language proficiency prove greater than was initially supposed.

**JAPA 100A (formerly half of 100) (1½) INTRODUCTION TO JAPANESE: I**

Japanese language for students with no previous knowledge of the language. Reading and writing practices and emphasis on the development of listening comprehension and speaking abilities. (Limited to 25 students per section. Not open to students with credit in 149 or equivalent) F(3-1)

**JAPA 100B (formerly half of 100) (1½) INTRODUCTION TO JAPANESE: II**

Elementary conversations, and written exercises in hiragana, katakana, and approximately one hundred and fifty kanji. (*Prerequisite*: A minimum final grade of B in 100A or permission of the instructor. Limited to 25 students per section. Not open to students with credit in 149 or equivalent) FS(3-1)

**JAPA 101A (formerly half of 101) (1½) BUSINESS JAPANESE: I**

An introduction to the Japanese language for students with no previous knowledge of Japanese. The course will emphasize speaking and listening comprehension, but will seek to impart basic reading and writing skills as well. Essentially the same grammatical forms and sentence patterns introduced in 100A will be covered; however, the primary goal of this course is to provide students with the basic skills required for communication in business situations. Vocabulary, and classroom drills and exercises, will be oriented toward that end. (Priority will be given to students currently enrolled in a program in the Faculty of Business. Not open to students with credit in 100A/B, 149, or equivalent. Limited to 25 students per section) F(4-0)

**JAPA 101B (formerly half of 101) (1½) BUSINESS JAPANESE: II**

A continuation of JAPA 101A. The course will offer further practice in oral expression and aural comprehension, and in reading and writing Japanese. (*Prerequisite*: normally a minimum final grade of B in 101A or equivalent. Priority will be given to students currently enrolled in a program in the Faculty of Business. Not open to students with credit in 100B or equivalent. Limited to 25 students per section) S(4-0)

**JAPA 149 (3) INTENSIVE JAPANESE: I**

Intensive Japanese language instruction for beginning language students. Development of basic language skills, including listening comprehension, speaking, reading and writing, through lectures, class discussions, tutorials for conversation practice, laboratory sessions, and other activities. Equivalent to 100A/B but covered in one term. (Limited to 25 students per section. Not open to students with credit in 100A and/or 100B or equivalent) F(7-1)

**JAPA 150 (3) INTENSIVE JAPANESE: II**

Continuation of 149 for those students who intend to practise their listening comprehension, speaking and reading abilities, and writing skills on a more advanced level. This course is equivalent to a second year Japanese course, but is very intensive. (*Prerequisite*: normally a minimum final grade of B in 149, 101, or equivalent; limited to 25 students per section) (Not open to students with credit in 200) S(7-1)

**JAPA 200 (3) SECOND YEAR JAPANESE**

A continuation of 100B for students who wish to develop their practical communicative skills through improving their comprehension, speaking, reading, and writing abilities in Japanese. (*Prerequisite*: normally a minimum final grade of B in 100B, 101, or equivalent; limited to 25 students per section) (Not open to students with credit in 150) Y(3-1)

**JAPA 201A (formerly part of 201) (1½) ASPECTS OF JAPANESE CULTURE: I**

A survey of Japan's cultural past from earliest times to the mid nineteenth century. The major trends in Japanese history will be outlined, with emphasis on the outstanding cultural developments of each epoch, especially in the areas of literature, drama, philosophy and religion, and the visual arts. Relevant social backgrounds will also be considered. No knowledge of Japanese language is required. (*Prerequisite*: None, the course is open to all students except those with credit in 201) NO(3-0)

**JAPA 201B (formerly part of 201) (1½) ASPECTS OF JAPANESE CULTURE: II**

A survey of Japanese culture from the mid nineteenth century to the present. Cultural developments will be considered in their historical and social contexts. Aspects of contemporary society, and Japan's position in the world community will be considered. No knowledge of Japanese language is required. (*Prerequisite*: 201A or permission of the instructor. Not open to students with credit in 201) NO(3-0)

**JAPA 260 (LING 260) (1½) INTRODUCTION TO THE JAPANESE LANGUAGE AND LINGUISTICS**

A general introduction to the synchronic and diachronic descriptions of Japanese; subjects covered may include: phonology, morphology, syntax, semantics, historical changes, poetics, dialectology, orthography, the sociolinguistic and psycholinguistic aspects of Japanese, the relationship between Japanese language, thought, and culture, and the history of Japanese linguistics. (Previous knowledge of Japanese not necessary) NO(3-0)

**JAPA 300 (3) THIRD YEAR JAPANESE**

A course aimed at a balanced development of listening, speaking, reading, and writing skills. Classes offer practice in listening comprehension, conversation, reading, translation, and composition. (*Prerequisite*: a minimum final grade of B in 150 or 200 or equivalent; limited to 25 students per section. Not open to students with credit, or who are enrolled, in 311) Y(3-0-1)

**JAPA 302A (formerly part of 302) (1½) JAPANESE LITERATURE IN TRANSLATION: FROM EARLIEST TIMES TO 1185**

A survey, through material in English translation, of Japanese literature from its earliest beginnings to the end of the aristocratic period. Emphasis will be on poetry, literary diaries, and narrative fiction, with considerable attention to *The Tale of Genji*. Where appropriate, relevant social and historical backgrounds will be examined. (*Prerequisite*: Second year standing or permission of the instructor) NO(3-0)

**JAPA 302B (formerly part of 302) (1½) JAPANESE LITERATURE IN TRANSLATION: THE MIDDLE AGES AND THE EARLY MODERN PERIOD (1185-1867)**

A survey, through selected English translations, of Japanese literature from the founding of the Kamakura Shogunate to the eve of the Meiji Restoration. Major literary trends will be examined, including linked verse and haiku poetry, No drama and the kabuki and puppet theatres, warrior tales and popular fiction. (*Prerequisite*: Second year standing or permission of the instructor) NO(3-0)

**JAPA 303A (formerly part of 303) (1½) MODERN JAPANESE LITERATURE IN TRANSLATION: FROM 1868 to 1926**

A survey, through selected English translations, of Japanese literature from the Meiji (1868-1912) and Taisho (1912-1926) eras. The course will focus on readings of works by Natsume Soseki, Mori Ogai, and other novelists, poets and playwrights. (*Prerequisite*: second year standing or permission of the instructor) F(3-0)

**JAPA 303B (formerly part of 303) (1½) MODERN JAPANESE LITERATURE IN TRANSLATION: FROM 1926 TO THE PRESENT DAY**

This course covers the literature of the turbulent Showa era (1926-1989). Most of the readings will be novels and short stories, and will include works by Kawabata, Tanizaki, and Mishima. (*Prerequisite*: second year standing or permission of the instructor) S(3-0)



**JAPA 311 (3) READINGS IN MODERN JAPANESE PROSE**

A course designed to develop reading and writing skills for students with a superior command of the spoken language. (*Prerequisite*: a minimum final grade of A- in 150 or 200 or a minimum grade of B in 300, or permission of the instructor. Limited to 25 students per section. Not open to students with credit, or who are enrolled, in 400 or 411)

Y(3-0-1)

**JAPA 320A (THEA 312) (1½) SEMINAR IN JAPANESE THEATRE AND DRAMA: FROM EARLIEST TIMES TO 1500**

This course will study early Japanese drama and theatre from its roots in folk and ritual performance. A majority of time will be spent on the study of No drama and the theoretical writings of Zeami, to be read in translation. This will be supplemented by film, video and audio recordings of theatrical productions. A variety of approaches will be taken in class, including discussion of the plays as literary texts, dramaturgy, staging and performance techniques. (*Prerequisite*: second year standing or permission of the instructor)

NO(3-0)

**JAPA 320B (THEA 313) (1½) SEMINAR IN JAPANESE THEATRE AND DRAMA: FROM 1500 TO THE PRESENT DAY**

This course will focus on Bunraku and Kabuki, but some reading and study will also be made of developments in 20th century theatre. Readings of plays in translation will be supplemented by screenings of videos and films of stage performances. (*Prerequisite*: second year standing or permission of the instructor)

NO(3-0)

**JAPA 358 (1½ or 3) TOPICS IN JAPANESE LANGUAGE, LITERATURE, AND CULTURE**

This seminar will examine selected topics related to Japanese language, literature, or cultural studies. Topic and instructor will vary from year to year. (May be taken more than once for credit in different topics up to a maximum of 9 units) (*Prerequisite*: Will vary according to the topic; prospective students should consult with the instructor or with the Program Adviser)

NO(3-0)

**JAPA 396 (LING 396) (1½) SOCIOLINGUISTIC ISSUES IN JAPANESE**

An examination of the Japanese language in its social context. A wide range of sociolinguistic topics will be covered, including non-verbal communication and types of Japanese spoken outside of Japan. Attention will be given to linguistic, dialectal, and stylistic variation in speech communities, and to sociolinguistic considerations such as class, gender, and social setting.

NO(3-0)

**JAPA 400 (3) ADVANCED READINGS IN MODERN JAPANESE PROSE**

Readings in modern Japanese, designed to broaden students' acquaintance with the Japanese writing system, expand their working vocabulary, and provide a firmer grounding to their general knowledge of the language. Course content may vary from year to year. (*Prerequisite*: a minimum grade of A- in 300 or 311 or permission of the instructor. Limited to 25 students per section)

Y(3-0)

**JAPA 411 (3) ADVANCED CONVERSATION AND COMPOSITION**

An advanced course designed to develop knowledge of practical Japanese through speaking and writing practice. (*Prerequisite*: a minimum final grade of A- in 300 or 311 or permission of the instructor. Limited to 25 students per section)

Y(3-0)

**JAPA 480 (1½ or 3) DIRECTED READINGS IN JAPANESE**

A seminar intended for advanced students prepared to read extensively in Japanese. Readings in Japanese and English will be assigned by the instructor in consultation with participating students. (May be taken more than once with the permission of the instructor and the Japanese Program Adviser. Students wishing to substitute this course for JAPA 490 or PACI 490 for the Pacific Studies Major graduation requirement must obtain prior approval from the Pacific Studies Program Adviser) (*Prerequisite*: JAPA 400 or equivalent; grade of A- or better in 300 plus enrolment in 400) (Not open to native speakers)

Y,F,S

**JAPA 490 (1½ or 3) DIRECTED STUDIES**

This course will normally involve readings and a research project in a particular area of Japanese Studies in which the student is qualified. The individual program of studies will be supervised by an appropriate faculty member. (May be taken more than once for credit in different topics up to a maximum of 6 units) (Normally open only to students who satisfy the requirements for PACI 490)

Y,F,S

**PACIFIC STUDIES****PACI 200A (formerly half of 200) (1½) INTRODUCTION TO THE PACIFIC REGION**

An interdisciplinary study of societies and civilizations in the Pacific region from their origins to the mid-twentieth century. The areas examined are China, Taiwan, Japan, Southeast Asia, and Pacific Islands. Case studies and comparisons will be used to survey the foundations of society, economics, politics, culture, and literature across the region.

F(3-0)

**PACI 200B (formerly half of 200) (1½) POSTWAR PACIFIC REGION**

Using case studies of Japan, China, Taiwan, Southeast Asia, and Pacific Islands, this course aims at providing an understanding of the political, economic, social, and demographic transformation of the Pacific Region since the Second World War. It will examine the external and internal causes of the transformation and its impact on the livelihood, role and status of ordinary men and women in the region. (*Prerequisite*: 200A)

S(3-0)

**PACI 290 (formerly 311) (1½) INTRODUCTION TO THEORY AND ANALYSIS IN PACIFIC STUDIES**

An introduction to a variety of theoretical perspectives applicable to the field of Pacific and Asian studies. Students are required to engage in critical analysis of selected problems in classroom presentations and papers. This course is required of all majors and should be taken in the second year. (*Pre- or corequisite*: 200A/B or 200)

F(3-0)

**PACI 319A (formerly 319) (1½) SOCIAL STRUCTURE AND SOCIAL CHANGE IN CHINA**

This course attempts to provide interpretations for the "development of underdevelopment" of China: the various structural, cultural as well as external barriers obstructing China's various attempts to modernize and industrialize in the 19th and early 20th centuries. It also examines the counter culture of China in the form of secret societies and peasant movements which paved the way for the triumph of Mao in 1949. (*Prerequisite*: 200A/B (or 200); *pre- or corequisite*: 290 (or 311) or equivalent)

F(3-0)

**PACI 319B (formerly 419) (1½) MODERN CHINESE SOCIETY**

This course traces the various attempts by China at economic development and socialist transformation since 1949. Particular emphasis will be placed on the impact of these policies on village life and the response of rural inhabitants in China. (*Prerequisites*: 200A/B (or 200), 290 (or 311) or equivalent, 319A)

S(3-0)

**PACI 321A (formerly 321) (1½) SOCIAL STRUCTURE AND SOCIAL CHANGE IN JAPAN**

This course will concentrate upon the transformation of Japanese society from the early 19th century up to the end of World War II, paying particular attention to the interlocking themes of economic development and political and social change. (*Prerequisite*: 200A/B (or 200); *pre- or corequisite*: 290 (or 311) or equivalent)

F(3-0)

**PACI 321B (formerly 421) (1½) MODERN JAPANESE SOCIETY**

A consideration of Japan's re-emergence as an industrialized nation in the postwar period and prospects for further development in view of the world energy crisis, environmental degradation, and other domestic and foreign problems. Emphasis will be upon the socio-political effects of Japan's postwar economic transformation. (*Prerequisites*: 200A/B (or 200), 290 (or 311) or equivalent, 321A)

S(3-0)



**PACI 323A (formerly 323) (1½) SOUTHEAST ASIA FROM 1800 TO 1945**

This course will focus on the transformation of Southeast Asia under the impact of Western imperialism from a multiplicity of political centers and circles of influence into nations with new structures and boundaries. It will focus on such themes as the nature of colonial rule, the introduction of capitalism, the rise of independence movements, and changes in rural society. (*Prerequisite*: 200A/B (or 200); *pre- or corequisite*: 290 (or 311) or equivalent) F(3-0)

**PACI 323B (formerly 423) (1½) POSTWAR SOUTHEAST ASIA**

This course will examine the postwar experiences of four Southeast Asian countries — Indonesia, Malaysia, the Philippines, and Vietnam. Major themes will be decolonization and the rise of independent states, the composition of elites, problems of liberal democracy, revolutionary movements, class and ethnic divisions, economic development, and the role of the military. (*Prerequisites*: 200A/B (or 200); 290 (or 311) or equivalent, 323A) S(3-0)

**PACI 325 (1½) SOCIAL AND ECONOMIC CHANGE IN THE PACIFIC REGION**

A study of theories of social and economic change, gender issues, sustainable development and the international division of labour. Case material will be drawn from Southeast Asia, Oceania and East Asia. (*Prerequisites*: 200A/B (or 200), 290 (or 311) or equivalent) S(3-0)

**PACI 328A (1½) SOCIAL STRUCTURE AND SOCIAL CHANGE IN OCEANIA**

This course examines the experience of the Polynesian, Micronesian and Melanesian societies, from Hawaii to Papua-New Guinea, up to the "compromise" phase of the early 20th century. Emphasis is given to understanding how local, regional, and international factors combined to shape the cultural and institutional forms with which Oceanic people entered the modern period. (*Prerequisite*: 200A/B (or 200); *pre- or corequisite*: 290 (or 311) or equivalent) F(3-0)

**PACI 328B (1½) CONTEMPORARY OCEANIA: SOCIETY AND POLITICS**

A study of political systems and social change in the Pacific Islands countries of Tonga, Fiji, Samoa, Cook Islands, French Polynesia, Vanuatu, Solomons and Papua-New Guinea, from the mid-20th century to the present day. The theme of "development, change and persistence" will be examined. Practical information on government and social issues will be developed. Where appropriate, attention will be given to Canada's existing and potential relations to the area. (*Prerequisite*: 200A/B (or 200), 290 (or 311) or equivalent, 328A) S(3-0)

**PACI 390 (1½) ADVANCED THEORY AND ANALYSIS IN PACIFIC STUDIES**

An advanced consideration of theoretical perspectives applicable to the field of Pacific and Asian Studies. Topics may include concepts of state and society, social and economic change and critiques of Orientalism. (*Prerequisites*: 200A/B (or 200), 290 (or 311)) NO(3-0)

**PACI 410 (1½) SEMINAR ON THAILAND**

An analysis of historical and contemporary issues in Thai studies. Topics vary from year to year; consult instructor. (*Prerequisites*: 200A/B (or 200), 290 (or 311) or equivalent, 323A/B) NO(3-0)

**PACI 412 (1½) SEMINAR IN SOUTHEAST ASIAN STUDIES**

A detailed analysis of socio-economic problems in Southeast Asia. Extensive class participation including presentation of seminar papers will be required. Details of topics to be covered can be obtained from the Instructor prior to registration. (*Prerequisite*: 200A/B (or 200), 290 (or 311) or equivalent, 323A and 323B) FS(3-0)

**PACI 413 (1½) TOPICS IN AUSTRALASIA AND/OR PACIFIC ISLAND STUDIES**

An intensive study of selected major issues and topics in Australasia and/or the Pacific Islands. Students should consult the Program Adviser for details of the topics to be covered. (*Prerequisite*: 200A/B (or 200), 290 (or 311) or equivalent, 328A or 328B) NO(3-0)

**PACI 414 (1½) SEMINAR IN OCEANIC STUDIES**

A detailed analysis of theoretical questions on Oceania. A research paper with seminar presentation of results is required. Students should consult the instructor on specific topics. (*Prerequisites*: 200A/B (or 200), 290 (or 311) or equivalent, 328A and 328B) F(3-0)

**PACI 415 (1½) CANADA AND THE ASIA-PACIFIC REGION; DEFENCE AND SECURITY**

An analysis of the interplay of domestic and external determinants in the formation of the defense and security policies of Canada with the major states of the Asia-Pacific Region in the Post Cold War era. Security is interpreted in the broadest sense of the word to include economic, political and cultural considerations rather than military hardware. (*Prerequisites*: 200A/B (or 200), 290 (or 311), or permission of instructor) S(3-0)

**PACI 417 (1½) SEMINAR IN TAIWANESE STUDIES**

An extensive study of selected major issues in 20th century Taiwan. Major themes will be problems of liberal democracy and revolutionary movements, evaluation of the "economic miracle," emergence of nationalism, and prospects for Sino-Taiwanese relations. (*Prerequisites*: 200A/B (or 200), 290 (or 311) or equivalent, 319A, 319B) NO(3-0)

**PACI 420 (1½) SEMINAR ON SOCIAL CONTINUITY AND SOCIAL CHANGE IN CHINA**

This seminar will explore selected aspects of modern and premodern China, focussing on the theme of social continuity and change as China moves from a Confucian state, through the Nationalist period, to a socialist state. Oral presentations, written papers and participation in class discussion are required throughout the course. (*Prerequisites*: 200A/B (or 200), 290 (or 311) or equivalent, 319A and 319B) F(3-0)

**PACI 422 (1½) SEMINAR ON POSTWAR JAPAN**

A close examination of a major issue on postwar Japan such as the Allied Occupation, the evolution of the labour movement, the postwar political economy, or Japan in the international division of labour. Consult instructor for specific topic. (*Prerequisite*: 200A/B (or 200), 290 (or 311) or equivalent, 321A and 321B) NO(3-0)

**PACI 425 (formerly 312) (1½) SEMINAR ON MINORITY PROBLEMS AND THE STATE IN SOUTHEAST ASIA**

Using ethnic relations in Southeast Asian societies as case studies, this course questions the applicability of the "melting pot" theory to developing nations. It looks at minority problems in Southeast Asia as manifestations of power struggles between pressure groups and authority. Students are required to present seminar papers on ethnic problems in Southeast Asia. (*Prerequisites*: 200A/B (or 200), 290 (or 311) or equivalent, 323A and 323B) NO(3-0)

**PACI 440 (1½) WOMEN IN POSTWAR JAPAN**

This seminar will deal with changes in women's rights and roles in Japan since 1945 with respect to the work force, constitutional and legal rights, education, political involvement, and the women's movement. (*Prerequisites*: 200A/B (or 200), 290 (or 311), 321A and 321B) F(3-0)

**PACI 443 (1½) ASIAN CANADIANS AND THEIR HOMELANDS**

This seminar course will concentrate on the basic social structure of the home communities of Asian immigrants, and the political, economic, and social forces leading to their migration to Canada. It will also examine the process of chain migration, associated problems of brain drain and labour shortage, and the impact of Asian Canadians' remittances, investment, donations and returned visits on the development of their home communities. (*Prerequisites*: 200A/B (or 200), 290 (or 311), and fourth year standing) S(3-0)

**PACI 480 (1½) SPECIAL TOPICS**

Offered either as a reading course, a tutorial or a seminar on Japan, China, Taiwan, Southeast Asia, and the Pacific Islands. Consult appropriate members of the Department about topics and requirements. May be taken more than once with permission of the department. Students wanting to use this course in place of PACI, JAPA, or CHIN 490 for Pacific Studies major graduation requirement must obtain prior approval from the Pacific Studies Program Adviser (*Prerequisites*: PACI 200A/B (or 200), 290 (or 311), and 3 units of upper-level courses in the geographical area on which the proposed project will focus. F or S



**PACI 490 (3) DIRECTED STUDIES**

Involves readings and a research project in a particular area of Pacific Studies in which the student is qualified. The individual program of studies will be supervised by an appropriate faculty member in consultation with the Coordinator. Requirements: regular attendance and presentation of research in the Faculty-Student Seminar. For major students only. (*Prerequisites*: 200A/B (or 200), 290 (or 311), and 3 units of upper level courses in the geographical area on which the proposed project will focus) **Y**

**SOUTHEAST ASIA****SEA 100A (1½) INTRODUCTION TO INDONESIAN: I**

Bahasa Indonesia for students with no previous knowledge of the language with emphasis on developing listening comprehension and speaking ability; common conversational patterns, as well as some of the cultural reasoning behind them. Reading and writing will also be introduced. (Limited to 25 students per section) **F(3-1)**

**SEA 100B (1½) INTRODUCTION TO INDONESIAN: II**

Basic conversations in Bahasa Indonesia and readings of a variety of elementary textual materials. (*Prerequisite*: A final grade of B or better in 100A or permission of the instructor. Limited to 25 students per section) **S(3-1)**

**SEA 200 (3) SECOND YEAR INDONESIAN**

A continuation of 100B for students who wish to improve their comprehension, speaking, reading and writing abilities in Bahasa Indonesia. (*Prerequisite*: A final grade of B or better in 100B or permission of the instructor) (Limited to 25 students) **Y(3-1)**

**SEA 201 (1½ or 3) SOUTHEAST ASIAN CULTURES AND SOCIETY**

A survey of cultural developments in Southeast Asia from earliest times to the present. Students will read a number of key religious, literary and dramatic texts. **F(3-0)**

**SEA 302 (formerly 202) (1½) SOUTHEAST ASIAN LITERATURE IN TRANSLATION**

A study of modern Southeast Asian literature and its traditions. Examines the major movements and periods of contemporary Southeast Asian literature through a sampling of works from the Philippines, Vietnam, Thailand, Indonesia and Malaysia. Special attention given to ways in which Southeast Asian writers attempt to position themselves and their works in relation to both Euro-american culture and society, and their own cultural and social traditions. (*Prerequisite*: third year standing or permission of the instructor) **F(3-0)**

**SEA 480 (1½) SPECIAL TOPICS**

May be offered as a reading course, a tutorial or a seminar in Southeast Asian language, literature or culture. Consult appropriate members of the Department concerning selection of topics. May be taken more than once with permission of the Department. Students wanting to use this course in place of PACI 490 for Pacific Studies Major graduation requirement must obtain prior approval from the Pacific Studies Program Advisor. (*Prerequisite*: 200 or equivalent, 201, 302 (formerly 202) or permission of instructor) **F**

**DEPARTMENT OF PHILOSOPHY**

Jeffrey E. Foss, B.A. (Alta.), M.A., Ph.D. (W. Ont.), Associate Professor and Chair of the Department

Rodger G. Beehler, B.A. (Man.), B.Phil. (Oxon.), Ph.D. (Calg.), Professor

Charles B. Daniels, A.B. (Chic.), D. Phil. (Oxon.), Professor

Eike-Henner W. Kluge, B.A. (Calg.), A.M., Ph.D. (Mich.), Professor

Charles G. Morgan, B.S. (Memphis St.), M.S., Ph.D. (Johns H.), M.Sc. (Alta.), M.Sc. (U. of Vic.), Professor

Monika Langer, B.A., M.A., Ph.D. (Tor.), Associate Professor

John M. Michelsen, B.A., M.A., Ph.D. (Wash.), Associate Professor

James O. Young, B.A. (S. Fraser), M.A. (Wat.), Ph.D. (Bost.), Associate Professor

**Visiting, Adjunct and Cross-listed Appointments:**

Thomas Heyd, B.A., M.A. (Calg.), Ph.D. (W. Ont.), Visiting Assistant Professor (1994-95)

Michael Picard, B.A. (Calg.), M.A., M.Sc., Ph.D. (Mass.), Visiting Assistant Professor (1994-95)

**GRADUATE PROGRAM**

For information on studies leading to the M.A. degree, see page 350.

**GENERAL, MAJOR AND HONOURS PROGRAMS**

**General** — 9 units of courses in Philosophy numbered 300 or above with all prerequisites satisfied.

**Major** — 21 units of courses in Philosophy comprising:

- Introduction to Philosophy (100)
- either Applied Logic: I (201) and Applied Logic: II (203) or Theoretical Logic (304A and 304B)
- Moral Philosophy (302)
- either The Rationalists (306) or The Empiricists and Kant (310)
- Plato (421) and Aristotle (422)
- 6 additional units in philosophy courses numbered 300 or higher.

**NOTE:** Although not required, students are encouraged to include at least one of the following: Introduction to Existentialism (211), Philosophy of Religion (214), Introduction To Philosophy of Science (220), Aesthetics (242), and Medieval Philosophy (245).

**Honours** — 30 units in courses in Philosophy comprising:

- Introduction to Philosophy (100)
- either Applied Logic: I (201) and Applied Logic: II (203) or Theoretical Logic (304A and 304B)
- Moral Philosophy (302)
- The Rationalists (306)
- The Empiricists and Kant (310)
- Plato (421) and Aristotle (422)
- 12 additional units in philosophy of which at least 6 must be in courses numbered 300 or higher.

**NOTE:** To obtain a First Class Honours degree it is required that a student have (1) a graduating average of 6.50 or higher, (2) at least a 6.50 average in all credit courses taken in Philosophy, and (3) at least a 7.00 average in all upper level courses completed in fulfillment of the minimum requirement of the honours program in philosophy. Upon completing the program, any student who meets requirement (1), but not (2) or (3), has the option of graduating with a first Class Major degree instead of with a Second Class Honours degree. To obtain a Second Class Honours degree, a student must have at least a 3.50 graduating average and have at least a 5.00 average in all credit courses taken in Philosophy.

Students completing first year and choosing Philosophy as a major may be interested in exploring the Arts Co-op option. Please see page 49 for details regarding program requirements and options.

**UNDERGRADUATE COURSES**

**NOTE:** Courses in the 100 series are broader in scope than those in the 200 series, but neither type should present any difficulty for the beginner. Both types are recommended for students in any program whether they plan to continue in Philosophy or not, and may be taken in any year; e.g. courses in the 200 series may be taken in the first as well as in later years. Other courses in Philosophy may be taken by satisfying the listed prerequisites or with permission of the Instructor.

Fuller information on each course will be issued by the Department. This will include the reading required and the name of the Instructor. Students are advised to ask the Department for copies of the annual Departmental handbook prior to registration. Not all courses will be offered every year. To meet the requirements for a Major or Honours program in the minimum number of years, students should plan accordingly.



(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### PHIL 100 (3) INTRODUCTION TO PHILOSOPHY

A beginner's investigation of central philosophical works concerning central philosophical issues, for example, the nature and possibility of truth and knowledge, the existence of God, free will and determinism, the nature of morality and justice, personal identity, the relationship of mind and body. But issues, types of approach, and texts vary from section to section. One overriding goal is learning how to think and argue critically and logically. See Philosophy course guide for more information. Y(3-0)

### PHIL 201 (1½) APPLIED LOGIC: I

The course is primarily concerned with the analysis of simple argument forms in natural language. Close attention is paid to the different uses of language in an argumentative context. There is a treatment of elementary principles of inductive logic, decision making, syllogistic reasoning, and informal fallacies. (The course is designed as a first course in logic for students with little or no symbolic orientation; it may be taken before or after 203. 304 is recommended for science students.) F(3-0)

### PHIL 203 (1½) APPLIED LOGIC: II

The course is designed to teach students to generate deductively valid arguments and to detect invalid arguments. Correct inference rules for sentential arguments and quantificational arguments are identified and treated from a purely syntactical point of view. A rigorous treatment of the semantic theory for sentential logic and quantification logic is also presented. (The course is designed as a first course in logic for students with little or no symbolic orientation; it may be taken before or after 201. 304 is recommended for science students.) S(3-0)

### PHIL 211 (1½) INTRODUCTION TO EXISTENTIALISM

An introduction to the themes and method of existentialism. The course will survey the writings of a number of existentialists. Questions such as the following will be addressed: Can the individual realize an authentic form of existence in a technological society dedicated to the ideals of comfort, efficiency, and security? Why have existentialists been so vehemently attacked and how have they responded? The figures and works chosen may vary from year to year. F(3-0)

### PHIL 214 (1½) PHILOSOPHY OF RELIGION

A consideration of some of the conclusions that have emerged from a philosophical examination of such religious questions as: the existence of God, survival of death, the problem of evil, the significance of religious ignorance, etc. Class discussion will be much emphasized. S(3-0)

### \*PHIL 220 (1½) INTRODUCTION TO PHILOSOPHY OF SCIENCE

This course will introduce both the epistemological and ethical issues concerning science as a method of gaining knowledge about the world. Epistemological issues may include the distinction between science and non-science, the logic of explanation, and the logic of confirmation. Ethical issues may include the ethics of experimentation with humans, animals, or the environment; the social consequences of scientific knowledge or technology; and the community control of research. (NOTE: Not open to students with credit in 222A or 222B) FS(3-0)

### PHIL 232 (1½) MORAL PROBLEMS OF CONTEMPORARY SOCIETY

An investigation of certain moral problems which might be called social problems as well. One or more of such topics as the following will be discussed: sexual relations, censorship, suicide; capital punishment; poverty; international hostilities. Differing moral positions concerning the issue(s) chosen will be identified, and their justifications sought out and examined. Students should consult the annual departmental handbook for a more specific description of the course for a given year. FS(3-0)

### PHIL 233 (1½) PHILOSOPHY OF EDUCATION

A philosophical inquiry into education. Among the questions to be asked are: What are we seeking to do in educating people? What sort of difference is education supposed to bring about in individuals, and in

society? How does educating persons differ from indoctrinating them? Is it the purpose of education to qualify people for employment? Is education essentially a conservative force in society? Does it corrupt or liberate? F(3-0)

### PHIL 235 (1½) ETHICS OF VIOLENCE AND WAR

An investigation of the ethical issues attending violent political protest or revolt, military action in a nuclear age, and terrorism for political or other ends. F(3-0)

### PHIL 238 (1½, formerly 3) PHILOSOPHY IN LITERATURE

The purpose of this course is to explore various philosophical theories and themes as these find expression in literature. In some years the course may be devoted to an examination of a single theme as it emerges in distinct periods and writings. Readings may range over the literature of many countries and will not necessarily be confined to works in the Western tradition. S(3-0)

### PHIL 242 (3) AESTHETICS

This course is an introductory examination of such basic philosophical problems of aesthetics as: What is a work of art? Do works of music differ from each other in much the same way as works in the plastic arts differ from each other? What role, if any, does consideration of emotions and intentions legitimately play in evaluation of a work of art? How does forgery differ from plagiarism? Time will be devoted to the discussion of the philosophical problems particular to each major art form, as well as to problems arising from comparison between these art forms. Y(3-0)

### PHIL 245 (3) MEDIEVAL PHILOSOPHY

The purpose of this course is to give the student some insight into the depth and richness of the philosophical, religious and political thought of the middle ages, and to convey an appreciation of the complexity and sophistication of medieval intellectual endeavour. Since Western thought was heavily influenced by Islamic philosophies and by mystical speculations, a special section of the course will be devoted to the philosophy of Islam and its impact on the West, and another to an examination of medieval mysticism. NO(3-0)

### PHIL 269 (3) THE SELF, SOCIETY AND CONTEMPORARY CRITICAL THOUGHT

An introductory philosophical investigation of the assumptions and arguments of selected contemporary writings of influence. Writings chosen vary from year to year, address fundamental questions about contemporary social life, and include disciplines other than philosophy. Y(3-0)

### PHIL 287 (3) EASTERN PHILOSOPHY

An introductory study of the major philosophic traditions of the East: Confucian, Taoist, Buddhist and Hindu; with comparisons made between Eastern and Western philosophies. Among the topics discussed are major teachings about mysticism; the divine; the unified self; the nature of the cosmos; and the right way to live. An effort will be made to illustrate the methods of philosophizing characteristic of the philosophers discussed. Texts: Readings include the *Tao Te Ching*, *The Analects*, *The Upanishads*, and others. NO(3-0)

### PHIL 302 (3) MORAL PHILOSOPHY

An inquiry into the foundation of moral reasoning and moral judgement, to be conducted by intensive study of selected seminal writings in moral philosophy. (Prerequisite: 6 units of philosophy or written permission of the instructor) Y(3-0)

### PHIL 304A (1½) THEORETICAL LOGIC: I

Concerned with a treatment and justification of propositional logic from a theoretical point of view: Ideal formal languages developed, and their relationship to natural languages discussed. Syntactic and semantic theories formalized for the analysis of complex deductive arguments. The metatheory of propositional logic, relating the syntactic theories and the semantic theories, developed. Topics include consistency, compactness, soundness, and completeness. (Prerequisite: None. Designed as a first course in logic for students with a symbolic orientation; it may also be taken following 201 and/or 203. Recommended for science students) F(3-0)



**PHIL 304B (1½) THEORETICAL LOGIC: II**

A continuation of Philosophy 304A, concerned with quantificational logic. Ideal formal languages developed, and their relationship to natural languages discussed. Syntactic and semantic theories will be formalized for the analysis of complex deductive arguments. The metatheory of quantificational logic, relating the syntactic theories and the semantic theories, developed. Topics include consistency, compactness, soundness, completeness, and interpolation. (*Prerequisite:* Philosophy 304A or permission of the instructor) S(3-0)

**PHIL 306 (3) THE RATIONALISTS**

The main purpose of this course is to afford the student an in-depth study of the so-called "continental rationalists". To this purpose, the positions of representative figures will be examined in some detail and an attempt made to relate them to each other. Full emphasis will be placed on tracing the results to the rationalists' preoccupation with *a priori* necessary truths and the principle of sufficient reason vis-a-vis their theories of perception and knowledge. (*Prerequisite:* 100 or permission of the instructor) Y(3-0)

**PHIL 310 (3) THE EMPIRICISTS AND KANT**

In the first term, a study of the major writings of Locke, Berkeley and Hume, with emphasis on metaphysics and epistemology. During the second term, an intensive study of Kant's epistemology and metaphysics, principally as presented in *The Critique of Pure Reason*. (*Prerequisite:* 100 or permission of the instructor) Y(3-0)

**PHIL 311 (1½) EXISTENTIALIST THINKERS**

This course will focus on one or two of the great philosophers in the tradition of existentialism and phenomenology, such as Nietzsche, Sartre, Merleau-Ponty, Camus, Kierkegaard and Heidegger. The philosophers chosen for study in any given year will be announced in the departmental handbook. (*Prerequisite:* 211 or permission of the instructor) S(3-0)

**PHIL 320 (1½) ADVANCED TOPICS IN PHILOSOPHY OF SCIENCE**

This course deals (at a more advanced level than in 220) with the methodology, epistemology, and ontology of science. Topics may include the logic of explanation, the logic of confirmation, the rationality of theory acceptance, the rationality of scientific revolutions, the unity of science, or the reality of theoretical entities. Not open to students holding credit for 222A. (*Prerequisite:* 220 or permission of the instructor) S(3-0)

**PHIL 324 (3) PHILOSOPHY OF HISTORY**

Major theories of history, such as those of Hegel, Marx, Spengler, Toynbee, and Niebuhr will be examined, as well as questions related to the conduct of historical inquiry. In addition, attention will be devoted to contemporary theories of history that attempt to explain the significance and direction of the 20th century. (*Prerequisite:* 100 or HIST 234, 236, 240, or 242, or permission of the instructor) NO(3-0)

**PHIL 326 (3) SOCIAL AND POLITICAL THOUGHT: ROUSSEAU AND MARX**

An inquiry into some foundational questions concerning human society and human good pursued by study of writings by Rousseau and Marx. Issues include the causes of inequality and unfreedom, the bases of social power, and the relation of individuals' understanding and moral sensibility to the kind of society in which they live. (*Prerequisite:* a previous course in philosophy, or written permission of the instructor) (Not open to students with credit in any of 325, 327, or 329) NO(3-0)

**PHIL 328 (1½) PHILOSOPHY OF LAW**

What, exactly, is law? How far, for example, does a law's being a law depend upon there being a threat of punishment if one does not obey? (What then distinguishes a society living under law from a society living under the domination of an alien military regime?) Is one always obligated to obey the law? Even an unjust law? Does one owe a duty of obedience to a corrupt government? How far do courts determine the content of the laws? Should the laws enforce morality? Should the laws protect persons from themselves? (*Prerequisite:* a previous course in philosophy, or written permission of the instructor) NO(3-0)

**PHIL 330 (1½) PROFESSIONAL AND BUSINESS ETHICS**

An examination of ethical issues arising in the contemporary professional and business setting; emphasis is on the mastery of representative ethical systems and concepts and their application to actual situations. FS(3-0)

**PHIL 331 (1½) ISSUES IN BIOMEDICAL ETHICS**

An investigation into the various ethical problems and concerns that arise in the professional medical context. Issues such as the nature of the physician-patient relationship, informed consent and right to know, fetal experiments and human experiments in general, euthanasia, insanity-treatment, right to treatment, etc. will be discussed. The aim of this course is not to give definitive solutions but to inculcate an awareness and understanding of the nature of the problems involved. (*Prerequisite:* A professional qualification (e.g. R.N., M.D., etc.) in Health Care, a course in philosophy or permission of the instructor) FS(3-0)

**PHIL 332 (1½) PHILOSOPHY AND TECHNOLOGY**

An inquiry into technology, its values and relevance to the human condition. What are the conceptual implications of the technological order? Some topics discussed: the distinction between tools and technology; technological development and values; engineering ethics and technology transfer; technology, interpersonal relationships, and alienation; technological domination of nature; art and technology; comparative examination of different philosophies of technology; appropriate technology; mastery of design of technology practices. (*Prerequisites:* Third or fourth year standing, or permission of the instructor) NO(3-0)

**PHIL 333 (ES314) (1½) PHILOSOPHY AND THE ENVIRONMENT**

A philosophical investigation of the moral and conceptual dimensions of environmental problems. Different philosophies of the relation between humans and nature will be compared. Some of the topics to be examined are: human wants and human satisfactions; nature and spiritual values; community; human obligations to other animals; defining quality of life. (*Prerequisite:* Third or fourth year standing, or permission of instructor) S(3-0)

**PHIL 334 (3) PHILOSOPHY OF LANGUAGE**

An inquiry into contemporary philosophical reflection on meaning, reference and truth. The course may address the implications of views on language for epistemology and metaphysics. The course focuses on authors such as Carnap, Wittgenstein, Quine, Davidson and Dummett. Some European writers may be discussed. (*Prerequisite:* 6 units of philosophy, or permission of the instructor) Y(3-0)

**PHIL 342A (1½) MINDS AND MACHINES: I**

The course is concerned with philosophical problems associated with the question of whether or not one can build a machine which thinks, reasons, learns from experience, understands natural language, is creative, feels pain, or has emotions. Topics may include mechanical analogues of life processes; the debate over mechanisms, organicism, and vitalism; mechanical self reproduction and evolution; free will and predictability. (*Prerequisite:* One full year course in at least one of the following areas: computing science, neurophysiology, philosophy or psychology; or permission of the instructor) NO(3-0)

**PHIL 342B (1½) MINDS AND MACHINES: II**

The course is a continuation of 342A. Topics may include: the top-down approach to artificial intelligence as advocated in the Turing Test; the analogical argument for the existence of other minds and its relation to the bottom-up approach to artificial intelligence; mechanical parallels of the mind-body problem; the relationship of Godel's incompleteness results to the possibility of mechanical minds. (*Prerequisite:* 342A or permission of the instructor) NO(3-0)

**PHIL 348 (1½ or 3) DIRECTED STUDIES IN PHILOSOPHY**

Under the supervision of a faculty member and with the approval of the Chair of the Department. (*Prerequisite:* 6 units in Philosophy, or permission of the instructor) (May be taken twice for a total of 3 units) FS



**PHIL 379 (CLAS 379) (1½) EARLY GREEK HISTORICAL AND PHILOSOPHICAL THOUGHT**

An investigation into the formation in Archaic and Classical Greece of such key concepts as rationality, causality, the nature-convention antithesis, law and equality, and female inferiority. These will be considered within the context of the society (from Hesiod to Herodotus) in which they evolved. The course does not presuppose a background in either classics or philosophy. NO(3-0)

**PHIL 403 (1½) PHILOSOPHICAL LOGIC**

The primary objective is to determine the philosophical limitations of classical logic. By classical logic is meant bivalent first order quantification theory, together with the usual extensions of it adequate for identity theory and formal number theory. Among the questions that may be raised are: Is there satisfactory philosophical motivation for quantum logic or for many-valued logic generally? Does a good theory of reference counsel the rejection of bivalence? Does classical first order logic inhibit a philosophical understanding of existence, identity and predication? (Prerequisites: 201/203 or 304 (or former 202), or MATH 332 or 333, and an additional 3 units of Philosophy, or permission of the instructor) F(3-0)

**PHIL 405 (3) 19TH CENTURY PHILOSOPHY**

A main emphasis will be on the post-Kantian development in German philosophy; Fichte, Hegel, Schopenhauer, Marx, Nietzsche. Some attention may also be given to the developments in France (e.g. Comte), Britain (e.g. Mill, Spencer, Bradley), and America (e.g. Royce, Peirce, James). The content of the course may vary from year to year, and the student should consult the annual Departmental handbook for a more specific description of the course for a given year. (Prerequisites: 9 units of philosophy, or permission of the instructor. 306 and 310 are both recommended as background for the course) NO(3-0)

**PHIL 408 (3) CONTEMPORARY EUROPEAN PHILOSOPHY**

A study of one or more of the major developments in recent European philosophy, such as phenomenology, hermeneutics, structuralism, and critical theory (the Frankfurt School). Among philosophers whose works may be selected for study are: Husserl, Heidegger, Sartre, Merleau-Ponty, Ricoeur, Levi Strauss, Foucault, Althusser, Horkheimer, Habermas, and Lukacs. (The focus of the course may vary from year to year, and interested students should consult the departmental handbook for more detailed information about the course for any given year.) (Prerequisite: 6 units in Philosophy, or permission of the instructor) Y(3-0)

**PHIL 414 (3) PHILOSOPHY OF MIND**

A study of mind and its place in nature. Typical issues: What is mind? Is it physical or nonphysical? What is consciousness? How are mind and consciousness related to the body and the rest of nature? Are conscious mental processes just neurophysiological processes? Can we know the presence of other minds? Are animals (plants, or machines) conscious? What is the scientific status of psychology, neuropsychol-

ogy, anthropology, sociology, and other sciences dealing with conscious beings? (Prerequisites: 100, 306 or 310, or permission of the instructor) NO(3-0)

**PHIL 416 (1½) KNOWLEDGE AND CERTAINTY**

An analysis of the concepts of knowledge, certainty, evidence, confirmation, etc. mainly in the context of philosophical scepticism about our knowledge of the external world, other minds, the past, and the future. (Prerequisite: 6 units of Philosophy, or permission of the instructor) F(3-0)

**PHIL 418 (1½) THEORY OF PERCEPTION**

A study of philosophical issues that pertain both to the psychology of perception and the theory of knowledge. The respective merits of realist, representationalist and phenomenalist theories of perception will come under examination. (Prerequisite: 6 units in Philosophy or permission of the instructor) NO(3-0)

**PHIL 421 (1½) PLATO**

A study of one or more Platonic dialogues, with special emphasis on the middle and late periods of Plato's philosophical activity. The content of the course may vary from year to year, and the student should consult the annual Departmental handbook for a more specific description of the course for a given year. (Prerequisite: 9 units of Philosophy. CLAS 379 and 380 are both recommended as background for the course.) F(3-0)

**PHIL 422 (1½) ARISTOTLE**

A study of one or more of the philosophical writings of Aristotle, with special emphasis on the *Metaphysics*. (Prerequisite: PHIL 421 or permission of the instructor. CLAS 379 and 380 are both recommended as background for the course.) S(3-0)

**PHIL 431 (1½) SEMINAR IN BIOMEDICAL ETHICS**

A seminar offering an in depth study of selected topics in biomedical ethics. Course content will vary, but will usually include such topics as informed consent, experimentation, professional/client and professional/professional relationship, allocation of resources, administrative procedures, etc. Methodology will include the use of video tape role plays and student presentation/analysis. (Prerequisite: 331 or permission of the instructor) (Limit of 20 students) S(3-0)

**PHIL 432 (3) METAPHYSICS**

An inquiry into some of the more general distinctions upon which our notion of reality depends. Topics will include: substance, quality and relation, existence, and quanta. (Prerequisites: 6 units of Philosophy or permission of the instructor. Recommended: 201 and 203) Y(3-0)

**PHIL 448 (1½ or 3) DIRECTED STUDIES IN PHILOSOPHICAL TOPICS**

Under the supervision of a faculty member and with the approval of the Chair of the Department. (Prerequisite: 9 units of Philosophy, or permission of the instructor) (May be taken twice for a total of 3 units)

## DEPARTMENT OF PHYSICS AND ASTRONOMY

Chair of the Department (Appointment pending)

Alan Astbury, B.Sc., Ph.D. (Liv.), F.R.S., F.R.S.C., R.M. Pearce Professor of Physics

George A. Beer, B.A.Sc., (Brit. Col.), Ph.D. (Sask.), Professor

R. Montgomery Clements, B.A.Sc., M.A.Sc., (Brit. Col.), Ph.D. (Sask.), P.Eng. (E.E.), Professor

Fred I. Cooperstock, B.Sc. (Man.), Ph.D. (Brown), Professor

Harry W. Dosso, B.A., M.Sc., Ph.D. (Brit. Col.), Professor

Christopher J.R. Garrett, B.A., Ph.D. (Cantab.), F.R.S., F.R.S.C. Lansdowne Professor of Ocean Physics

F. David A. Hartwick, B.Eng. (McG.), M.A., Ph.D. (Tor.), Professor

Robert E. Horita, B.A.Sc., M.A.Sc., Ph.D. (Brit. Col.), Professor

Donald E. Lobb, B.E., M.Sc., Ph.D. (Sask.), Professor

Grenville R. Mason, B.A.Sc., (Brit. Col.), M.Eng. (McM.), Ph.D. (Alta.), Professor

Charles E. Picciotto, A.B., M.A., Ph.D. (Calif.), Professor

Christopher J. Pritchett, B.Sc. (Sask.), M.Sc., Ph.D. (Tor.), Professor

Lyle P. Robertson, B.A., M.A., Ph.D. (Brit. Col.), Professor

Colin D. Scarfe, B.Sc., M.Sc. (Brit. Col.), Ph.D. (Cantab.), Professor

Jeremy B. Tatum, B.Sc. (Brist.), Ph.D. (Lond.), Professor

Don A. VandenBerg, B.Sc. (Leth.), M.Sc. (U. of Vic.), Ph.D. (A.N.U.), Professor

Arthur Watton, B.Sc. (Imp. Coll., Lond.), Ph.D. (McM.), Professor

John T. Weaver, B.Sc. (Brist.), M.Sc., Ph.D. (Sask.), Professor

J. Anthony Burke, A.B., A.M., Ph.D. (Harv.), Associate Professor

Ann C. Gower, B.A., Ph.D. (Cantab.), Associate Professor

Richard K. Keeler, B.Sc. (McG.), M.Sc., Ph.D. (Brit. Col.), Associate Professor

Harbhajan S. Sandhu, B.A., B.Sc., M.Sc. (Panj.), Ph.D. (Brit. Col.), Associate Professor

Michel Lefebvre, B.Sc. (Laval), Ph.D. (Cantab.), Assistant Professor

Dale B. Pitman, B.A. (Wellesley), Ph.D. (Tor.), Assistant Professor

Charles R. Card, B.A. (Reed Coll.), Senior Scientific Assistant



- Peter M. Cross, B.Sc. (U. of Vic.), Coordinator, Cooperative Education Program  
 John Goudy, C.D. and Bar, B.A. (U. of Vic.), Administrative Officer  
 Russell M. Robb, B.Sc. (Calg.), Senior Scientific Assistant  
 Donald E. Stenton, B.Sc. (Brit. Col.-Vic. Coll.), Senior Laboratory Instructor  
 Alexander Y. Wong, B.Sc. (U. of Vic.), Senior Laboratory Instructor  
 Nikiforos Zepantis, B.Sc. (Brit. Col.), Senior Programmer Analyst
- Visiting, Adjunct and Cross-listed Appointments:**  
 Douglas A. Bryman, B.Sc. (Syr.), M.S. (Rutgers), Ph.D. (Virginia Poly. Inst. and State U.), Adjunct Professor (1994-96)  
 Harvey A. Buckmaster, B.Sc. (Alta.), M.A., Ph.D. (Brit. Col.), Adjunct Professor (1994-96)  
 Norman R. Chapman, B.Sc. (McM.), Ph.D. (Brit. Col.), Adjunct Professor (1994-96)  
 Harold W. Fearing, B.A. (Kan.), M.Sc., Ph.D. (Stan.), Adjunct Professor (1994-96)  
 James E. Hesser, B.A. (Kan.), M.A., Ph.D. (Prin.), Adjunct Professor (1994-96)  
 Roy D. Hyndman, B.A.Sc., M.A.Sc. (Brit. Col.), Ph.D. (A.N.U.), F.R.S.C., Adjunct Professor (1994-96)  
 Arthur Olin, B.Sc. (McG.), Ph.D. (Harv.), Adjunct Professor (1993-95)  
 J. D. Poll, Ph.D. (Tor.), Adjunct Professor (1993-95)  
 John W. Scrimger, B.A., M.A. (Sask.), Ph.D. (Tor.), Adjunct Professor (1994-96)  
 Sidney van den Bergh, A.B. (Prin.), M.Sc. (Ohio St.), Dr. rer. Nat. (Gött.), F.R.S., F.R.S.C., Adjunct Professor (1993-95)  
 Brian A. Whalen, B.Sc. (Wash.), M.Sc., Ph.D. (Brit. Col.), Adjunct Professor (1994-96)  
 Trevor Dawson, B.Sc., Ph.D. (U. of Vic.), Adjunct Associate Professor (1994-96)  
 Alan Honma, B.S. (Mich.), M.S., Ph.D. (Stan.), Adjunct Associate Professor (1993-95)  
 Randall J. Sobie, B.Sc., M.Sc., Ph.D. (Tor.), Adjunct Associate Professor (1994-96)  
 Glen M. Marshall, B.Sc. (McG.), M.Sc., Ph.D. (Brit. Col.), Adjunct Assistant Professor (1994-96)  
 George D. Spence, B.Sc. (Calg.), M.Sc., Ph.D. (Brit. Col.), Assistant Professor (Earth and Ocean Sciences) (1994-96)

## PHYSICS AND ASTRONOMY GRADUATE PROGRAMS

For information on studies leading to the M.Sc. and Ph.D. degrees, see page 351.

The Department participates in the Cooperative Education Program in the Faculty of Graduate Studies and by individual arrangement Physics graduate students may participate in a Cooperative Education graduate program as described in the Faculty of Graduate Studies of this Calendar, section 6.0.

Further information may be obtained from the Chair of the Physics and Astronomy Department Graduate Committee.

## ENTRY INTO PHYSICS AND ASTRONOMY UNDERGRADUATE PROGRAMS

Algebra 12 or Mathematics 12 and Physics 11 are required for entry into the Physics and Astronomy undergraduate programs; Physics 12 is expected, although students lacking Physics 12 may enter the programs by registering in the special section of Physics 112 which has 4 hours of lectures per week. Students planning to take the Honours programs should normally also have completed Chemistry 11 or 12. Advanced placement is available for students with high standing in both Algebra 12 or Mathematics 12 and Physics 12.

## PHYSICS COOPERATIVE EDUCATION PROGRAM

The Cooperative Education Program in the Faculty of Arts and Science is described on page 43.

The Physics Cooperative Education Program is a year-round program which includes, in addition to the normal Major or Honours academic program for the B.Sc., employment in jobs related to Physics or Astronomy in industry or government for at least four scheduled Work Terms interspersed between academic terms. This employment is related as

closely as possible to the student's course of studies and individual interest.

To qualify for entry to the Physics Coop program, a student must have satisfied the university's English requirement, be enrolled full time, be proceeding to an Honours or Major degree in the Department of Physics and Astronomy, have at least a 4.50 grade point average, and at least a second class in each physics or astronomy course taken. To remain in the program, a student must be enrolled full time and maintain at least a second class average (3.50). In addition, satisfactory performance in each Work Term is required. The first Work Term (following first year) is optional; the last four scheduled Work Terms are required. Students who choose to take the first Work Term will thus complete a total of five Work Terms. Successfully completed Work Terms will be recorded on the student's record and transcript. Work Term credit by Challenge, as outlined on page 38 of this Calendar, is permitted in the Physics Coop Program.

Honours students in the Cooperative Education program are normally required to obtain credit for at least  $7\frac{1}{2}$  units in each academic term, or 15 units in two successive academic terms which may be separated by a Work Term. The ninth academic term is not subject to this requirement.

## PHYSICS AND ASTRONOMY UNDERGRADUATE PROGRAMS

The Department offers the following B.Sc. degree programs: General, Major and Honours in Physics; Major and Honours in Astronomy; combined Major in Physics and Astronomy; Honours in Physics and Mathematics; Honours in Physics and Astronomy; Combined Major and Honours in Physics and Earth Sciences (Geophysics); Combined Major and Honours in Physics and Ocean Sciences (Physical Oceanography). In the Major in Physics and in the Major in Astronomy students may, with the appropriate selection of Computer Science courses, also complete a Minor in Computer Science. For a B.A. degree, students may choose the General Physics program for one of the fields of concentration. A B.Sc. degree in Physics provides a sound basis for entry to graduate programs of study in fields such as Atmospheric Science, Geophysics, and Oceanography.

Admission to the third and fourth years of the Honours programs requires the permission of the Department. Admission to the Honours Physics and Mathematics program requires the permission of both the Department of Physics and Astronomy and the Department of Mathematics and Statistics. Admission to the Honours Physics and Earth Sciences (Geophysics) Program, and the Honours Physics and Ocean Sciences (Physical Oceanography) Program requires the permission of both the Department of Physics and Astronomy and the School of Earth and Ocean Sciences (SEOS). Students in the Honours programs will be expected to maintain at least second class standing. Completion of the Honours programs in four years normally requires 18 units of credit in each of the third and fourth years, with the exception that in the Honours in Physics  $16\frac{1}{2}$  units are required in third year.

For any Major program in the Department, the course grades used in calculating the grade point average on which the class of degree is based, must include those for all courses (including departmental electives) numbered 300 and above that are specified by the Department. In all Honours programs the class of degree will be determined on the basis of the grade point average calculated using 30 units of upper level courses specified by the Department. For both Major and Honours degrees the class designated will be First Class if this average is at least 6.50 and Second Class if this average is between 3.50 and 6.49.

## GENERAL AND MAJOR PROGRAMS

The requirements common to all programs are:

- PHYS 112 or 120, 214, 215, 216, 220
- MATH 100, 101, 200, 201; CSC 110 or 112
- PHYS 317, 325, 326, 413A; PHYS 413B (except for the Majors in Physics and Earth Sciences)
- MATH 323 or 325, 326, 330A, 330B (except for Honours in Physics and Mathematics).

## Additional requirements for each program

### 1. General in Physics

- $1\frac{1}{2}$  units of electives chosen from Physics and Astronomy courses numbered 300 or higher



2. **Major in Physics**

e) 7½ units of electives chosen from Physics and Astronomy courses (or other approved courses) numbered 300 or higher (at least 3 units of which must be in Physics courses)

3. **Major in Astronomy**

e) ASTR 200A, 200B, 303, 304, 403, 404, and 400 or 402

4. **Combined Major in Physics and Astronomy**

e) ASTR 200A, 200B, 303, 304, 403, 404, and 400 or 402

f) 7½ units of electives chosen from Physics and Astronomy courses (or other approved courses) numbered 300 or higher

5. **Honours in Physics**

e) 3 units of first year Chemistry; MATH 233A, 233B

f) PHYS 321A, 321B, 410, 421, 422, 423, 429A, 429B, 460

g) 9 units of electives chosen from Physics and Astronomy courses (or other approved courses) numbered 300 or higher (at least 3 units of which must be in Physics courses)

6. **Honours in Astronomy**

e) 3 units of first year Chemistry; MATH 233A, 233B

f) PHYS 321A, 321B, 410, and 422 or 423

g) ASTR 200A, 200B, 303, 304, 403, 404, 429A, 429B, 460, and 400 or 402

h) 6 units (3 units if ASTR 200A and 200B taken in third year) of electives chosen from Physics courses numbered 300 or higher

7. **Honours in Physics and Astronomy**

e) 3 units of first year Chemistry; MATH 233A, 233B

f) PHYS 321A, 321B, 410, 421, 422, and 423, and 460 or ASTR 460

g) ASTR 200A, 200B, 303, 304, 403, 404, and 400 or 402

h) 3 units of electives chosen from PHYS 429A, 429B, ASTR 429A, 429B

i) 3 units (unless ASTR 200A and 200B taken in third year) of electives chosen from Physics courses (or other approved courses) numbered 300 or higher

8. **Honours in Physics and Mathematics**

e) 3 units of first year Chemistry; MATH 233A, 233C

f) PHYS 321A, 321B, 410, 421, 422, 423, 460

g) MATH 325, 326, 333A, 333C, 334, 338, 434, 445A, 445B

h) 1½ units of electives chosen from Physics and Astronomy courses numbered 300 or higher

i) 4½ units of electives chosen from Mathematics courses numbered 300 or higher

9. **Combined Major in Physics and Earth Sciences (Geophysics)**

e) 3 units of first year Chemistry; EOS 100, 101

f) PHYS 210; EOS 201, 202; CHEM 245

g) PHYS 411, 427; EOS 300, 310, 320, 410

h) 1½ units of electives chosen from PHYS 413B, EOS 430

i) 7½ units of electives chosen from courses in the School of Earth and Ocean Sciences, the Department of Physics and Astronomy, or courses in other departments

10. **Combined Major in Physics and Ocean Sciences (Physical Oceanography)**

e) 3 units of first year Chemistry; EOS 100, 101

f) PHYS 321A, 411, 426; EOS 340, 431, and 433 or 435

g) 6 units of electives chosen from courses in the School of Earth and Ocean Sciences, the Department of Physics and Astronomy, or courses in other departments

11. **Honours in Physics and Earth Sciences (Geophysics)**

e) 3 units of first year Chemistry; EOS 100, 101

f) PHYS 210; EOS 201, 202; CHEM 245; MATH 233A, 233B

g) PHYS 321A, 321B; EOS 300, 310, 320

h) PHYS 411, 427, 460; EOS 410, 480, 499

i) 1½ units of electives chosen from PHYS 413B, EOS 430

j) 4½ units of electives chosen from PHYS 410, 426, 431; EOS 440, 460, 470

12. **Honours in Physics and Ocean Sciences (Physical Oceanography)**

e) 3 units of first year Chemistry; EOS 100, 101

f) MATH 233A, 233B

g) PHYS 321A, 321B, 410, 411, 422, 426, 460; EOS 340, 431, and 432 or 435

h) 3 units of electives chosen from PHYS 429A, 429B, EOS 499

i) 3 units of electives chosen from Physics courses numbered 300 or higher

j) 3 units of electives chosen from EOS 432, 433, 434, 435

## COURSE SEQUENCES IN PHYSICS PROGRAMS

In first year the student will begin the program with Physics 120 or 112 as shown in sequences A and B below. The sequence in first and second year is determined by the student's physics background, in third and fourth year by the program selected.

## FIRST AND SECOND YEARS

| Year A |                     | B                   |  |
|--------|---------------------|---------------------|--|
| I      | PHYS 120 & 220 (3)  | PHYS 112 (3)        |  |
|        | MATH 100 & 101 (3)  | MATH 100 & 101 (3)  |  |
|        | CSC 110 or 112 (1½) | CSC 110 or 112 (1½) |  |
|        | Other courses (7½)  | Other courses (7½)  |  |
|        | TOTAL (15)          | TOTAL (15)          |  |
| II     | PHYS 214 & 215 (3)  | PHYS 214 & 215 (3)  |  |
|        | PHYS 216 (1½)       | PHYS 220 & 216 (3)  |  |
|        | MATH 200 & 201 (3)  | MATH 200 & 201 (3)  |  |
|        | Other courses (7½)  | Other courses (6)   |  |
|        | TOTAL (15)          | TOTAL (15)          |  |

## NOTES:

Students satisfying either the A or B sequence may, subject to the following notes, proceed to any one of the third and fourth year programs in Physics or Astronomy listed below.

- PHYS 120 in sequence A is intended for students planning a career in Physics or Astronomy, and have attained at least a B standing in each of Physics 12 and Mathematics 12. Those with less than a B standing and planning a career in Physics or Astronomy, or those planning a career in some other Physical Science (such as Chemistry or Earth and Ocean Sciences), should take PHYS 112 in sequence B.
- Students entering PHYS 112 who do not have credit for Physics 12, must register in section 1 with 4 lecture hours per week.
- Students planning to enter any of the Honours programs in third year should take the required 3 units of Chemistry in first year. It is recommended that students planning to enter the Major in Astronomy or the Major in Physics and Astronomy programs also take 3 units of Chemistry.
- In addition to the Mathematics courses listed in sequences A and B, those students selecting any of the Honours Programs, must include MATH 233A and 233B, normally in second year. In the Honours in Physics and Mathematics program MATH 233A and 233C may be taken in first year in which case MATH 333A and 333C may be taken in second year. Students selecting one of the Major programs are strongly advised to include MATH 233A, and preferably also 233B, in second year.
- ASTR 200A & 200B are requirements in all Astronomy programs and should normally be taken in second year. Students entering the third year in the Astronomy programs without having completed ASTR 200A and 200B will normally be required to take these courses in third year. ASTR 303 and 304 should then be deferred to fourth year. Students electing to take ASTR 400 or 402 in third year may defer ASTR 304 to the fourth year.
- In the third and fourth years of all Honours programs the PHYS electives must be chosen in consultation with the Department of Physics and Astronomy. In the Honours in Physics and Mathematics program the MATH electives must be chosen in consultation with the Department of Mathematics and Statistics. In the Honours in Physics and Earth Sciences and in Physics and Ocean Sciences programs the EOS electives must be chosen in consultation with the School of Earth and Ocean Sciences.
- Each of PHYS 317, 321A, 321B, 326, 413A and 413B have three 3-hour laboratory periods.
- Third and fourth year students in the Major programs are invited to attend PHYS 460 or ASTR 460.
- ASTR 200A, 200B, PHYS 210, CSC 115, 225, and 230 are recommended electives in the second year of the Physics programs.



### THIRD AND FOURTH YEARS IN THE GENERAL AND MAJOR PROGRAMS

|     | <i>General in Physics</i>   | <i>Major in Physics</i>  | <i>Major in Astronomy</i>  |
|-----|---|--|--|
| III | PHYS 317<br>PHYS 325 & 326<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326                        | PHYS 317<br>PHYS 325 & 326<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326                             | PHYS 317<br>PHYS 325 & 326<br>ASTR 303 & 304<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326 |
| IV  | PHYS 413A & B<br>PHYS elective (1½)   | PHYS 413A & B<br>PHYS electives (7½)   | PHYS 413A & B<br>ASTR 400 or 402<br>ASTR 403 & 404   |
|     | <i>Major in Physics and Astronomy</i>   | <i>Major in Physics and Earth Sciences</i>   | <i>Major in Physics and Ocean Sciences</i>   |
| III | PHYS 325 & 326<br>PHYS 413A & B<br>ASTR 303 & 304<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326 | PHYS 317<br>PHYS 325 & 326<br>EOS 300<br>EOS 310 & 320<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326 | PHYS 317 & 321A<br>PHYS 325 & 326<br>EOS 340<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326 |
| IV  | PHYS 317<br>ASTR 400 or 402<br>ASTR 403 & 404<br>PHYS electives (7½)                              | PHYS 411 & 427<br>PHYS 413A<br>EOS 410<br>PHYS or EOS<br>elective (1½)<br>Electives (7½)               | PHYS 411 & 426<br>PHYS 413A & B<br>EOS 431<br>EOS 433 or 435<br>Electives (6)                |

### THIRD AND FOURTH YEARS IN THE HONOURS PROGRAMS

|     | <i>Honours in Physics</i>  | <i>Honours in Astronomy</i>   | <i>Honours in Physics and Astronomy</i>   |
|-----|--|---|---|
| III | PHYS 317<br>PHYS 321A & B<br>PHYS 325 & 326<br>PHYS 413A & B<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326                           | PHYS 321A & B<br>PHYS 325 & 326<br>PHYS 413A & B<br>ASTR 303 & 304<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326        | PHYS 321A & B<br>PHYS 325 & 326<br>PHYS 413A & B<br>ASTR 303 & 304<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326          |
| IV  | PHYS 410 & 421<br>PHYS 422 & 423<br>PHYS 429A & B<br>PHYS 460<br>PHYS electives (9)  | PHYS 317 & 410<br>PHYS 422 or 423<br>ASTR 400 or 402<br>ASTR 403 & 404<br>ASTR 429A & B<br>ASTR 460<br>PHYS electives (6) | PHYS 317 & 410<br>PHYS 422 & 423<br>PHYS 421<br>ASTR 400 or 402<br>ASTR 403 & 404<br>PHYS or ASTR 460<br>PHYS electives (6) |
|     | <i>Honours in Physics and Mathematics</i>  | <i>Honours in Physics and Earth Sciences</i>  | <i>Honours in Physics and Ocean Sciences</i>  |
| III | PHYS 321A & B<br>PHYS 325 & 326<br>PHYS 413A & B<br>MATH 325 & 326<br>MATH 334 & 434<br>MATH 338<br>MATH elective (1½)                 | PHYS 317<br>PHYS 321A & B<br>PHYS 325 & 326<br>EOS 300<br>EOS 310 & 320<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326   | PHYS 317<br>PHYS 321A & B<br>PHYS 325 & 326<br>PHYS 413A & B<br>EOS 340<br>MATH 330A & B<br>MATH 323 or 325<br>MATH 326     |
| IV  | PHYS 317<br>PHYS 410 & 421<br>PHYS 422 & 423<br>PHYS 460<br>MATH 333A & C<br>MATH 445A & B<br>MATH electives (3)<br>PHYS elective (1½) | PHYS 411 & 427<br>PHYS 413A<br>PHYS 460<br>EOS 410 & 480<br>EOS 499<br>PHYS & EOS<br>electives (6)                        | PHYS 410 & 411<br>PHYS 422 & 426<br>PHYS 460<br>EOS 431<br>EOS 432 or 435<br>PHYS & EOS<br>electives (9)                    |

### PHYSICS UNDERGRADUATE COURSES

Students should consult the Chair concerning courses offered in any particular year. The timetable also shows which courses are offered.

Where consent of the Department is specified as a course prerequisite, this consent must be obtained from the Department Chair or the Chair's nominee.

A student may obtain at most three units of credit from the set of courses 100, 102, 103, 110 and 112, with the exception that a student with credit for 100 may subsequently obtain credit for 102 or 103 or 112 for a total of 4½ units.

Attention is drawn to 103, a course intended for students who wish to increase their understanding of science and the physical world as part of their cultural development. It is not intended as a prerequisite for further courses in Physics.

Students should note the availability of 310A.

In many of the courses, especially those beyond first year, students will be given short lists of reference books that are helpful supplements to the prescribed texts, but that generally do not have to be bought by the students. Students may generally expect weekly problem assignments and a number of one hour tests during the term. In some courses, students may be assigned problems that may require the use of a programmable calculator or computer.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered this session)

#### PHYS 102 (3) GENERAL PHYSICS

Mechanics, heat, sound, wave motion, light, electricity, magnetism, and modern physics. (This course will meet the requirements in physics of students in Biology and Environmental Studies. Students intending to take further courses in Physics should take 112 rather than 102 and must take MATH 100 and 101 rather than 102) (*Prerequisite*: B.C. Secondary School Physics 11, or equivalent; MATH 100 or 102, which may be taken concurrently) YK(3-3)

#### PHYS 103A (formerly half of 103) (1½) A SURVEY OF PHYSICS: I

A description of physical principles with some selected applications to problems in our modern technological society. This course is intended for students who wish to increase their understanding of science and the physical world as part of their cultural or career development. (3-3)

#### PHYS 103B (formerly half of 103) (1½) A SURVEY OF PHYSICS: II

A description of physical principles with some selected applications to problems in our modern technological society. This course is intended for students who wish to increase their understanding of science and the physical world as part of their cultural or career development. (3-3)

#### PHYS 112 (3) BASIC PHYSICS

Mechanics, optics, light, heat, electricity, magnetism, wave motion, fluids, and modern physics. This is a basic course in physics for students planning a program of study in the physical sciences such as Physics, Astronomy, Chemistry, and Earth and Ocean Sciences. (Credit can be obtained for only one of 112, 120 and 122.) (*Prerequisites*: B.C. Secondary School Physics 12; MATH 100 and 101, both of which may be taken concurrently. Students with at least a B standing in both Physics 12, and either Algebra 12 or Mathematics 12, and who are planning a career in Physics or Astronomy, should consider enrolling in PHYS 120 and 220 in the first year instead of PHYS 112.) Y(3-3)

#### PHYS 120 (1½) MECHANICS: I

Kinematics, particle dynamics, curvilinear motion, momentum, angular momentum, energy. This course is primarily for students who are planning a career in Physics or Astronomy. (Credit can be obtained for only one of 120, 122 and 112) (*Prerequisites*: at least a B standing in B.C. Secondary School Physics 12, and Algebra 12 or Mathematics 12; MATH 100 which may be taken concurrently; permission of the Department) F(3-3)

#### PHYS 122 (1½) MECHANICS FOR ENGINEERS

Kinematics, particle dynamics, curvilinear motion, momentum, angular momentum, energy. (Credit can be obtained for only one of 122, 120 and 112) (*Prerequisites*: at least a B standing in B.C. Secondary School Physics 12, and Algebra 12 or Mathematics 12; MATH 100 which may be taken concurrently) (Open to Engineering students only) F(3-3)



**PHYS 125 (1½) FUNDAMENTALS OF PHYSICS**

Simple harmonic motion; wave motion, sinusoidal waves, phase velocity, Huygens' Principle, resonance, reflection, refraction and interference; sound; the classic Doppler effect; ray and first order matrix optics, total internal reflection and dispersion; the electromagnetic spectrum; optical spectra and electronic structure; de Broglie waves; principles and applications of nuclear structure, nuclear reactions and ionizing radiation. (Credit cannot be obtained for both 125 and 110) (*Prerequisites:* 122 (or 120); MATH 100, 133 or 233A, 101 which may be taken concurrently) (Normally open to Engineering students only) S(3-3)

**PHYS 210 (1½) INTRODUCTORY GEOPHYSICS**

Structure of the earth, plate tectonics and seafloor spreading. Principles of geomagnetism, geoelectricity, rock magnetism, gravity, seismology, geochronology; heat flow, and solar terrestrial relations. (*Prerequisites:* 112 or 120; MATH 100 and 101) F(3-0)

**PHYS 214 (1½) AN INTRODUCTION TO LABORATORY ELECTRONICS**

Standard laboratory electronic equipment, circuit properties such as impedance and resonance, semiconductor devices such as diodes and transistors, system functions such as feedback and switching. (*Prerequisites:* any one of 102, 110, 112, 120; MATH 100 or 102. F(2-4)

**PHYS 215 (1½) WAVES AND INTRODUCTORY MODERN PHYSICS**

Wave motion; an introduction to topics in modern physics. (*Prerequisites:* 110 or 112 or 120; MATH 200 and 201 which may be taken concurrently) SK(3-3)

**PHYS 216 (1½) INTRODUCTORY ELECTRICITY AND MAGNETISM**

Electrostatics, magnetostatics, dielectrics, magnetic materials, steady currents, Faraday's Law of Induction. (Credit cannot be obtained for both PHYS 216 and ELEC 216) (*Prerequisites:* 110 or 112 or 120; MATH 200 which may be taken concurrently) SK(3-3)

**PHYS 220 (1½) MECHANICS: II**

Relativistic kinematics and dynamics. Noninertial systems, central force motion, harmonic oscillator, elementary rigid body dynamics. (*Prerequisites:* 112 or 120; MATH 101 which may be taken concurrently) FS(3-3)

**PHYS 290 (1-3) DIRECTED STUDIES**

This course is intended primarily to aid students transferring from other institutions to fit into the physics programs. Students must obtain the consent of the Department before registering. Y

**PHYS 310A (1½) PHYSICS AND TECHNOLOGY OF ENERGY**

An introduction to the physics and technology of producing, distributing and using energy from various sources. Present and possible future energy systems are examined with respect to efficiency, hazards and impact on world energy reserves. The course is intended for students in the humanities and social sciences, as well as the natural sciences, and may be taken for credit by students in Physics or Astronomy programs as an elective outside these programs. (*Prerequisites:* 15 units of university level credit, including 3 units of Physics, or permission of the Department) NO(3-0)

**PHYS 317 (1½) THERMODYNAMICS**

The theory and application of thermodynamics. (*Prerequisites:* 220; MATH 200) FK(3-1)

**PHYS 321A (1½) CLASSICAL MECHANICS: I**

Topics covered include oscillatory motion, motion under a central force, dynamics of a system of particles, gravitational potential theory, special relativity. (*Prerequisites:* 220; MATH 330A, and 323 or 323A or 325; the mathematics courses may be taken concurrently) F(3-1)

**PHYS 321B (1½) CLASSICAL MECHANICS: II**

Rigid body dynamics, an introduction to analytical mechanics including Lagrange's and Hamilton's equations, theory of small oscillations. (*Prerequisites:* 321A; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) S(3-1)

**PHYS 325 (1½) OPTICS**

Reflection and refraction at plane and spherical surfaces, thin lenses, lens aberrations, optical instruments, interference, diffraction, polarization. (*Prerequisites:* 220; MATH 200 and 201) F(3-3)

**PHYS 326 (1½) ELECTRICITY AND MAGNETISM**

Transients in RCL circuits, transmission lines, displacement current. Maxwell's equations, plane electromagnetic waves. (*Prerequisites:* 216; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) SK(3-1)

**PHYS 410 (1½) TOPICS IN MATHEMATICAL PHYSICS: I**

Mathematical methods applied to solving physical problems. Topics include a selection of the following: conformal mappings, Fourier and Laplace transforms with inversion theorems, calculus of variations, and group theory. (*Prerequisites:* 220; MATH 233A, 330B, and 323B or 326) F(3-0)

**PHYS 411 (1½) TIME SERIES ANALYSIS**

Continuous and discrete Fourier transforms, convolution and correlation, autocorrelation, spectral density estimation, deconvolution, linear filtering, frequency domain and two dimensional filtering. Digital data processing and computer analysis are stressed. (*Prerequisites:* MATH 330B, and 323B or 326) F(3-0)

**PHYS 413A (1½) MODERN PHYSICS: I — INTRODUCTION TO QUANTUM PHYSICS**

An introduction to quantum mechanics, the hydrogen atom, optical spectra and electronic structures, x-rays, lasers. (*Prerequisites:* 215 and 216; MATH 330A, and 323 or 323A or 325; the mathematics courses may be taken concurrently) F(3-1)

**PHYS 413B (1½) MODERN PHYSICS: II**

Selected applications of quantum mechanics to molecular physics, statistical mechanics and solid state physics, nuclear physics, fundamental particles. (*Prerequisites:* 413A; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) S(3-1)

**PHYS 415 (1½) GENERAL RELATIVITY AND COSMOLOGY**

Introduction to Einstein's theory of gravitation and its experimental verification. Applications within the realms of astrophysics and cosmology. (*Prerequisites:* 321B; MATH 330B; or consent of the Department) F(3-0)

**PHYS 420 (1½) TOPICS IN MATHEMATICAL PHYSICS: II**

Topics include a selection from advanced topics in complex variable theory and special functions. (*Prerequisite:* 410 or equivalent) (Normally open to Honours students only, others by consent of the Department) (3-0)

**PHYS 421 (1½) STATISTICAL MECHANICS**

Boltzmann, Bose-Einstein and Fermi-Dirac statistics. (*Prerequisites:* 317, 321B and 413A; MATH 330B, and 323B or 326) (Normally open to Honours students only, others by consent of the Department) S(3-0)

**PHYS 422 (1½) ELECTROMAGNETIC THEORY**

Potential theory, Maxwell's equations, electromagnetic waves. (*Prerequisites:* 326; MATH 330B, and 323B or 326) (Normally open to Honours students only, others by consent of the Department) S(3-0)

**PHYS 423 (1½) QUANTUM MECHANICS**

Operator postulates, barrier penetration, harmonic oscillator, one-electron atom, angular momentum operators, spin. (*Prerequisites:* 321B and 413B; MATH 330A, and 323 or 323A or 325; the mathematics courses may be taken concurrently) (Normally open to Honours students only, others by consent of the Department) F(3-0)

**PHYS 424 (1½) ATOMIC, NUCLEAR AND PARTICLE PHYSICS**

Topics in nuclear, atomic, and particle physics. (*Prerequisite:* 423) S(3-0)

**PHYS 425 (1½) ELECTRONICS**

Electronic circuit theory with applications. (*Prerequisites:* 214 and 216; MATH 330B) F(3-0)



**PHYS 426 (1½) FLUID MECHANICS**

Introduction to basic theory of flow, kinematics of flow, Navier-Stokes equations, and selected topics from basic hydraulics, irrotational flows, waves, turbulent flows, similarity solutions, and compressible flows. (*Prerequisites:* 220 and 317; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) F(3-0)

**PHYS 427 (1½) GEOPHYSICS**

Physics of the earth, including atmospheric studies and extraterrestrial effects. Structure and composition of the earth, elementary seismology, and geomagnetism. (*Pre- or corequisites:* 326; MATH 330B, and 323B or 326) S(3-0)

**PHYS 428 (1½) INTRODUCTORY SOLID STATE PHYSICS**

An account of the central aspects of the physics of solids including crystal structure and symmetry; thermal, electrical, magnetic, elastic, and optical properties of solids. (*Prerequisites:* 326 and 413A; MATH 330B, and 323B or 326) S(3-0)

**PHYS 429A (1½) SENIOR LABORATORY AND THEORY OF MEASUREMENT: I**

Advanced experiments. Instruction on experimental techniques and theory of measurement. (*Prerequisite:* 413B) Y(0-3)

**PHYS 429B (1½) SENIOR LABORATORY AND THEORY OF MEASUREMENT: II**

Advanced experiments including student projects. Instruction on experimental techniques and theory of measurement. (*Corequisite:* 429A) (Normally open to Honours students only, others by consent of the Department) Y(0-3)

**PHYS 431 (1½) CONTINUUM MECHANICS**

Tensor calculus with the properties of a continuum are developed, leading to a study of wave propagation in elastic media with application to seismology. The course concludes with a brief introduction to the basic equations of fluid mechanics. (*Prerequisites:* 220; MATH 323B or 326) S(3-0)

**PHYS 460 (0) PHYSICS SEMINAR**

Talks by students, faculty and outside speakers. (Grading: COM, N or F) Y(2-0)

**PHYS 490 (1-3) DIRECTED STUDIES**

Students must obtain the consent of the Department before registering. Y

**ASTRONOMY UNDERGRADUATE COURSES**

Attention is drawn to 120, a course intended for students who wish to increase their understanding of astronomy and the physical world as part of their cultural development. It is not intended as a prerequisite for further courses in Astronomy.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered this session)

**ASTR 120 (3) ELEMENTARY ASTRONOMY**

This course is primarily for students not majoring in Astronomy. It will present Astronomy as a representative science in its ancient and modern contexts. Topics will include: the earth, the moon, the planets, stars, stellar systems, galaxies, the universe, cosmology, space flight, and extraterrestrial life. Practical and observational work will be included. Laboratories on alternate weeks. (Senior science and mathematics students who want a single astronomy course should take 200A and 200B rather than 120.) YR(3-3)

**ASTR 200A (1½) GENERAL ASTRONOMY: I**

Astronomical coordinate systems, time, Kepler's laws and planetary orbits, the earth-moon system, the planets and minor planets, comets, meteors and meteorites, interplanetary particles, cosmogony, the sun. (*Prerequisites:* PHYS 112 or 120; MATH 100 and 101) F(3-3)

**ASTR 200B (1½) GENERAL ASTRONOMY: II**

Stellar distances and magnitudes, binary stars, spectral classification, stellar evolution, variable stars, stellar motions, star clusters, interstellar medium, structure and rotation of the Galaxy, external galaxies and cosmology. (*Prerequisites:* PHYS 112 or 120; MATH 100 and 101) SK(3-3)

**ASTR 303 (1½) INTRODUCTORY EXTRAGALACTIC ASTRONOMY**

The distance scale, properties of galaxies, observational cosmology. (*Prerequisites:* 200A and 200B; PHYS 215 and 216; MATH 330A, and 323 or 323A or 325; the mathematics courses may be taken concurrently. PHYS 317 is desirable.) F(3-0)

**ASTR 304 (1½) THE SOLAR SYSTEM**

Astronomy of the sun, the planets and satellites, meteors and comets, including recent results from space exploration. (*Prerequisites:* 200A and 200B; PHYS 215 and 216; PHYS 317 which may be taken concurrently; MATH 330B, and 323B or 326; the mathematics course may be taken concurrently) S(3-0)

**ASTR 400 (1½) RADIO ASTRONOMY**

The detection of cosmic radio waves; mechanisms for production of radio noise; the sources of radio waves; the contribution of radio astronomy to our knowledge of the universe. (*Prerequisites:* 200A and 200B or the consent of the Department; PHYS 326, 413B which may be taken concurrently; MATH 330B, and 323B or 326) S(3-0)

**ASTR 402 (1½) DYNAMICAL AND GALACTIC ASTRONOMY**

The positions and motions of the stars, the two and three body problems, precession, perturbation techniques, galactic rotation, the spiral structure of our Galaxy. (*Prerequisites:* 200A and 200B or the consent of the Department; PHYS 321B which may be taken concurrently; MATH 330B, and 323B or 326; the mathematics courses may be taken concurrently) S(3-0)

**ASTR 403 (1½) INTRODUCTION TO ASTROPHYSICS: I**

The observational data of astrophysics; stellar atmosphere and the production of stellar spectra. (*Prerequisites:* 200A and 200B or the consent of the Department, PHYS 317 and 325; PHYS 413A which may be taken concurrently; MATH 330B, and 323B or 326) F(3-0)

**ASTR 404 (1½) INTRODUCTION TO ASTROPHYSICS: II**

The structure and evolution of the stars; interstellar matter; high energy astrophysics. (*Prerequisites:* 403 or consent of the Department; PHYS 413B which may be taken concurrently) S(3-0)

**ASTR 429A (1½) OBSERVATIONAL ASTRONOMY: I**

Observational and practical work, directed reading. (Normally open to Honours students only. Others by consent of the Department) (No text required) F(0-6)

**ASTR 429B (1½) OBSERVATIONAL ASTRONOMY: II**

Observational and practical work, directed reading. (Normally open to Honours students only. Others by consent of the Department) (No text required) S(0-6)

**ASTR 460 (0) ASTRONOMY SEMINAR**

Talks by students, faculty and outside speakers. (Grading: COM, N or F) Y(2-0)

**ASTR 490 (1-3) DIRECTED STUDIES**

(Students must obtain the consent of the Department before registering.) Y



## DEPARTMENT OF POLITICAL SCIENCE

R.B.J. (Rob) Walker, B.A. (Wales), M.A., Ph.D. (Queen's), Professor and Acting Chair of the Department  
 Robert E. Bedeski, B.A., M.A., Ph.D. (Calif.-Berk.), Professor  
 Ronald I. Cheffins, Q.C., B.A., LL.B. (Brit. Col.), LL.M. (Yale), of the Bar of British Columbia, Professor  
 Colin J. Bennett, B.Sc., M.Sc. (Wales), Ph.D. (Ill.), Associate Professor  
 Somer Brodribb, B.A. (Laval), M.A. (York), Ph.D. (Tor.), Associate Professor  
 Warren Magnusson, B.A. (Man.), B.Phil., D.Phil. (Oxon.), Associate Professor  
 J. Terence Morley, B.A. (Dal.), Ph.D. (Queen's), Associate Professor  
 Norman J. Ruff, B.Sc. (Econ.) (Southampton), M.A. (McM.), Ph.D. (McGill), Associate Professor  
 R. Jeremy Wilson, B.A., M.A. (Alta.), Ph.D. (Brit. Col.), Associate Professor  
 A. Claire Cutler, B.A. (Brit. Col.), M.Sc. (Lond. Sch. Econ. and Poli. Sci.), LL.B. (McG.), Ph.D. (Brit. Col.), Assistant Professor  
 Radhika Desai, B.A. (Baroda), M.A., Ph.D. (Queen's), Assistant Professor  
 Michael C. Webb, B.A. (Brit. Col.), M.Sc. (Lond.), Ph.D. (Stan.), Assistant Professor

### Visiting, Adjunct and Cross-listed Appointments:

Ernest M. Keenes, B.A. (Man.), M.A., Ph.D. (Car.), Visiting Assistant Professor (1994-95)  
 Judith Stamps, B.A., M.A. (U. of Vic.), Visiting Assistant Professor (1994-96)

### GRADUATE PROGRAMS

For information on studies leading to the M.A. degree, see page 353.

### GENERAL, MAJOR AND HONOURS PROGRAMS

The Department of Political Science offers General, Major and Honours programs leading to the B.A. Third and Fourth Year students not enrolled in the General, Major or Honours programs may take as a free elective any third or fourth year course in Political Science for which no prerequisite or other restriction is specified.

Students who may want to do graduate work are strongly advised to take POLI 339 and also some course work in statistical methods.

Information about current course offerings may be obtained from the Departmental Office in the Cornett Building.

**General** — A concentration in Political Science under the general program requires 6 units of Political Science courses numbered at the 100 or 200 level and 9 units at the 300 or 400 level.

**Major** — Students intending to major in Political Science are required to complete 6 units of Political Science courses at the 100 or 200 level. 4½ of these 6 units must be chosen from Political Science 100, 202, 210 and 240 with a grade of at least C+ in each of the courses being counted toward this requirement. It is strongly recommended that these courses be taken during the first two years of a student's program because no more than 6 units of upper-level Political Science courses will be counted towards the Major degree requirements before the grade requirement for the lower-level courses have been met.

Major students are required to complete 15 units of Political Science courses at the 300 or 400 level, including at least 3 units from 300A, 300B, 300C. They must take a minimum of 3 units from each of at least three of the Groups I-VI. Seminar courses are open only to students registered as Political Science majors, or to non-majors having the permission of the instructor. Enrollment in seminar courses is limited to 20 students, while in other upper level courses the limit is 50 students. Students intending to major in Political Science may wish to consult a faculty member in the Department when planning their programs for the third and fourth years.

**Honours** — Students will be admitted to the Honours Program in Political Science, at the discretion of the Department, at the beginning of the third year. Students must have a grade point average of at least 5.00 in 6 units of Political Science courses numbered at the 100 or 200 level. Students contemplating Honours are advised to select 200 level

courses from 202, 210, 230, 240. To continue in the program in the fourth year, students must secure a grade point average of at least 6.00 in Political Science courses taken during the third year, and maintain an overall grade point average of 5.00.

The Honours program requires completion of 21 units of Political Science courses numbered at the 300 and 400 level with a minimum of 3 units from each of at least four of the Groups I-VI. The courses must include 338, 339, and 499, and at least 3 units from 300A, 300B, 300C. Honours students are required to consult a faculty member in the Department when planning their programs for the third and fourth years.

Graduation with First Class Honours requires:

- (1) a graduating average of 6.50 or higher
- (2) an average of 6.50 or higher in the best 21 units of Political Science at the 300 and 400 levels, and
- (3) at least a grade of A- in 499

Upon completing the program, any student who meets requirement (1), but not (2) or (3), will have the option of graduating either with a First Class Major degree or (if the Honours work meets the requirements) with a Second Class Honours degree. To secure a Second Class Honours degree a student must have (1) a graduating average of 3.50 or higher, (2) an average of 4.50 or higher in the best 21 units of Political Science at the 300 and 400 levels, and (3) at least a grade of B in 499.

## DEPARTMENT OF POLITICAL SCIENCE — UNDERGRADUATE COURSE INDEX

### First and Second Year

100 (3)  
 202 (1½) 210 (1½) 220 (1½) 230 (1½) 240 (1½) 250 (1½)

### Third and Fourth Year

| <i>I</i>                       | <i>II</i>  | <i>III</i>                              |                |
|--------------------------------|--|---|----------------|
| <i>Political Theory</i>        | <i>Comparative Politics</i>                        | <i>Political Analysis</i>               |                |
| 300A (1½)                      | 311 (3)  | 330 (1½)                                |                |
| 300B (1½)                      | 313 (3)  | 332A (1½)                               |                |
| 300C (1½)                      | 314 (1½)   | 332B (1½)                               |                |
| 303 (1½)                       | 317 (1½)   | 333 (1½)                                |                |
| 402 (1½)                       | 318 (1½)   | 338 (1½)                                |                |
| 404 (1½)                       | 411 (1½)   | 339 (1½)                                |                |
| 405 (1½)                       | 416 (1½)   | 430 (1½)                                |                |
| 406 (1½)                       | 418 (1½)   | 431 (1½)                                |                |
| 413 (1½)                       | 419 (1½)   | 433 (1½ or 3)                           |                |
| <i>IV</i>                      | <i>V</i>   | <i>VI</i>                               | <i>VII</i>     |
| <i>International Relations</i> | <i>Public Administration &amp; Policy Analysis</i> | <i>Canadian Government and Politics</i> | <i>Honours</i> |
| 340 (1½)                       | 350 (3)  | 320 (3)                                 | 490 (1½ or 3)  |
| 343 (1½)                       | 351 (1½)   | 360 (1½)                                | 499 (3)        |
| 344 (1½)                       | 352 (1½)   | 361 (1½)                                |                |
| 346 (1½)                       | 353 (1½)   | 362 (1½)                                |                |
| 347 (1½)                       | 425 (1½)   | 465 (3)                                 |                |
| 348 (1½)                       | 451 (1½)   | 468 (1½)                                |                |
| 442 (1½)                       | 456 (1½)   | 470 (3)                                 |                |
| 444 (1½)                       | 457 (1½)   |   |                |
| 445 (1½)                       | 458 (1½)   |   |                |
| 447 (1½)                       |  |   |                |



## PROGRAM STRUCTURE

6 units of courses numbered at the 100 or 200 level

| General  | Major   | Honours   |
|--|---|---|
| 9 units of courses numbered at the 300 or 400 level. | 15 units at the 300 or 400 level including at least 3 units from 300A, 300B, 300C. These must include 3 units in each of at least 3 of the Groups I-VI. 490 may not be applied to this distribution requirement without approval of the Department. | 338, 339, 499 and 3 units from 300A, 300B, 300C and additional units to a total of 21 at the 300 or 400 level. These must include 3 units in each of at least 4 of the Groups I-VI. 490 may not be applied to this distribution requirement without approval of the Department. |

## UNDERGRADUATE COURSES

*The Department will make every effort to ensure that the courses marked with an asterisk are offered each year. For confirmation of this, together with details of other courses to be offered, the terms in which classes will be given, and the names of course instructors, prospective students should consult the Political Science Guidebook. This Guidebook will be published in May and copies will be available at the Department of Political Science office, at Records Services, and at the Arts and Science Advising Centre.*

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### \* POLI 100 (3) CANADIAN GOVERNMENT AND POLITICS

An introduction to Political Science through an examination of the politics and institutions of Canadian Government. The course will include analysis of the social and economic context of Canadian politics and will cover such topics as parties, voting behaviour, nationalism and regionalism, federalism, parliament, the bureaucracy, the courts and the policy processes. (Credit cannot be obtained for both 100 and 470)

Y(3-0)

### \*POLI 202 (1½) AN INTRODUCTION TO POLITICAL THEORY

This course will focus on one or more topics in contemporary political theory such as the nature of democracy, the role of ideology, or the functions of the state. Different analyses will be compared, and students will be introduced to various models and techniques of theoretical inquiry.

FS(3-0)

### \*POLI 210 (1½) COMPARATIVE POLITICS

An introduction to the comparative study of politics and the basic structures and processes of modern political systems, including an examination of selected foreign governments.

FS(3-0)

### POLI 220 (1½) LAW AND POLITICS

An introduction to the role of law in the political process, including a description of the judicial structure in Canada, and the processes of the judiciary in the English speaking world as compared with the European tradition.

NO(3-0)

### POLI 230 (1½) POLITICAL ANALYSIS

An introduction to contemporary political analysis. Several different approaches to the study of politics will be considered, such as institutional analysis, public choice theory and neoinstitutionalism, marxist and neomarxist thought, biological, psychological and cultural perspectives and theories of political development.

NO(3-0)

### \*POLI 240 (1½) INTERNATIONAL POLITICS

A general introduction to the study of international politics. Attention will be directed to the foundation, development and current structure of the states system. Specific important events in the relationships among states will serve to illuminate the causes, goals, means and subsequent consequences of major foreign policy decisions.

FS(3-0)

### POLI 250 (1½) PUBLIC POLICY FORMATION IN CANADA

An introductory examination of the impact of cultural, economic and political factors in the determination of Canadian public policies. This course will include some case studies which compare the policy formation process in Canada with that of other countries.

NO(3-0)

## GROUP I — POLITICAL THEORY

### POLI 300A (formerly 301) (1½) ANCIENT AND MEDIEVAL POLITICAL THOUGHT

A survey of the main themes and assumptions of political theory in ancient Greece and medieval Europe, including study of Plato's *Republic* and Aristotle's *Politics*. (Not open to students with credit for 300 prior to 1982-83)

FS(3-0)

### \*POLI 300B (formerly half of 300) (1½) EARLY MODERN POLITICAL THOUGHT

An examination of basic texts and persistent themes in Western political thought from the Renaissance to the Enlightenment, including study of texts by such key thinkers as Machiavelli, Hobbes, Locke, Hume, and Kant. (Prerequisite: Third or fourth year standing or permission of the Department)

FS(3-0)

### \*POLI 300C (formerly half of 300) (1½) POST ENLIGHTENMENT POLITICAL THOUGHT

An examination of basic texts and persistent themes in Western political thought from the Enlightenment to the late 19th century, including study of texts by such key thinkers as Rousseau, Hegel, Marx and J.S. Mill. (Prerequisite: 300B)

FS(3-0)

### POLI 303 (1½) POLITICAL THOUGHT IN EAST ASIA

A survey of political thought in China, Japan, and Korea, including Confucianism and Legalism, through Sun Yat-sen, Mao Zedong, and other schools and theorists. The course will focus on how political thought in the sinic world conceptualized state and society relationships, and, in the past century, how it has confronted the challenges of Westernization and modernization. (Prerequisite: 318 or 202, or permission of the instructor)

S(3-0)

### POLI 402 (formerly 302) (1½) CONTEMPORARY THEMES IN POLITICAL THOUGHT

Major themes in contemporary political thought focusing especially on the interplay between theories of modernity and concepts of political identity and community. (Prerequisites: 300B and either 300A or 300C or permission of the instructor)

F(3-0)

### POLI 404 (1½, formerly 3) THEORIES OF THE MODERN STATE (seminar course)

Seminar on 19th and 20th century theories of the state, focussing especially on liberal democratic writers and their critics. (Prerequisites: 300B and either 300A or 300C or permission of the instructor)

NO(3-0)

### POLI 405 (1½, formerly 3) IDEOLOGY AND CONTEMPORARY POLITICAL THOUGHT (seminar course)

Competing accounts of the relationship between knowledge and power, with special attention to contemporary debates about language, modernity, political identity, and legitimate authority. (Prerequisites: 300B and either 300A or 300C or permission of the instructor)

NO(3-0)

### POLI 406 (1½, formerly 3) MARXIST POLITICAL THOUGHT (seminar course)

An analysis of the contributions to political thought of Marx, Engels, and various Marxian thinkers in the 19th and 20th centuries. Marxism is examined as a scientific theory and method, as a philosophy of history, as a mode of social criticism, and as an ideology of political change. (Prerequisite: 300B and either 300A or 300C or permission of the instructor)

S(3-0)

### POLI 413 (1½) FEMINIST POLITICAL THOUGHT (seminar course)

An examination of feminist critiques of contemporary political theory and feminist social criticism and political thought, with particular attention to debates about knowledge, subjectivity and difference. (Prerequisite: 411 or 468, or permission of the instructor)

S(3-0)



## GROUP II — COMPARATIVE POLITICS

### POLI 311 (3) WESTERN EUROPEAN GOVERNMENTS AND POLITICS

Analysis of the historical background to, institutional framework for, and actors involved in, political conflict in Western European countries. Consideration will also be given to a number of contemporary policy issues. (*Prerequisite*: 210 or permission of the instructor) NO(3-0)

### \*POLI 313 (3) AMERICAN GOVERNMENT AND POLITICS

An analysis of the politics and institutions of government in the United States; areas of study will include such topics as the presidential system and executive-legislative relations, judicial behaviour, political parties and electoral behaviour, and the federal framework. (*Prerequisite*: 210 or permission of the instructor) Y(3-0)

### POLI 314 (1½) BRITISH GOVERNMENT AND POLITICS

Political institutions, organizations, and behaviour in contemporary Britain. The policy alternatives advanced by different political groups on a number of issues, including the role of the state in the economy and the territorial distribution of power. (*Prerequisite*: 210 or permission of the instructor) (Not open to students with credit in 316) F(3-0)

### POLI 317 (1½) POLITICS OF DEVELOPMENT

An introduction to some of the principal issues and problems facing the countries of Asia, Africa and Latin America, this course examines the various theories which have influenced policies and concepts of development. (*Prerequisite*: 210 or permission of the instructor) S(3-0)

### POLI 318 (1½) GOVERNMENT AND POLITICS IN EAST ASIA

Government and politics in China, Japan, North and South Korea, and Taiwan, with special attention to state formation, political reform, institutions, and ideology. (*Prerequisite*: 210 or permission of the instructor. 317 is recommended) F(3-0)

### POLI 411 (1½) WOMEN AND PUBLIC POLICY IN COMPARATIVE PERSPECTIVE (seminar course)

The intent and impact of public policies which are important to women, and the avenues through which women in different countries have attempted to influence them. (A previous course in comparative politics or women's studies is strongly recommended) (Not open to students with credit in 433, "Issues in Politics: Women and Public Policy in Comparative Perspective") S(3-0)

### POLI 416 (1½) STATE, REVOLUTION AND REFORM IN EAST ASIA (seminar course)

Politics, political economy, modernization reforms, ideology, and state institutions in various societies in East Asia. (A previous course in Asian politics is strongly advised) S(3-0)

### POLI 418 (formerly 331) (1½) EXECUTIVE AND LEGISLATIVE POLITICS

A consideration of the functions, roles, behaviour and organization of representative assemblies in Canada, Britain and the United States. Executive-legislative relationships will be emphasized. NO(3-0)

### POLI 419 (1½) POLITICS IN INDIA

An exploration of the major themes in the political and economic development of independent India, including the fate of the Nehruvian development model, the contemporary crisis of the state and secularism, the transition to globalisation, and the politics of caste, class and gender. (Not open to students with credit in 433, "Politics in India") S(3-0)

## GROUP III — POLITICAL ANALYSIS

### POLI 330 (1½) PUBLIC OPINION AND MASS POLITICAL BEHAVIOUR

An examination of the factors shaping public opinion and mass political behaviour. Topics will include political participation and apathy, the formation of political attitudes and ideology, discontent and protest, social structure and political cleavages, political socialization, and voting. NO(3-0)

### POLI 332A (formerly half of 332) (1½) THE LOCAL STATE

A comparative analysis of the institutions and practices of local government, with a particular focus on Canada, the United States and Britain. (Not open to students with credit in 332 or 450) F(3-0)

### POLI 332B (formerly half of 332) (1½) URBAN POLITICS

A seminar on urban social movements, the politics of planning and development, and the political economy of cities in the era of globalization. (*Prerequisite*: 332A or permission of the instructor) (Not open to students with credit in 332 or 450) NO(3-0)

### POLI 333 (1½) REPRESENTATION AND ELECTORAL SYSTEMS

A cross-national review of the design of electoral systems, their determinants and components, and quantitative analysis of their consequences for political representation. The primary focus will be on Western democracies. (Open only to Political Science Majors and Honours students) S(3-0)

### \*POLI 338 (1½) APPROACHES TO POLITICAL ANALYSIS (seminar course)

An examination of the role of the main analytical tools used in the study of politics: concepts, categories, hypotheses, theories, and models. (Required for Honours students in their third year, recommended for Majors students, but not recommended as a general elective) F(3-0)

### POLI 339 (1½) THE EMPIRICAL ANALYSIS OF POLITICS (seminar course)

An introduction to the systematic analysis of political phenomena. Topics deal with the methodological underpinnings of political science and include: historical and institutional analyses, measurement, sampling, research design, and statistical testing. Illustrations will be drawn from various studies of political behaviour and policy formation. (Required for Honours students, preferably in their third year; recommended for students considering graduate studies in Political Science or Public Administration.) (Not open to students who have credit in 337) S(3-0)

### POLI 430 (1½) MASS MEDIA AND POLITICS

An examination of mass communication and the dissemination of political information; the course will cover both historical and contemporary questions. S(3-0)

### POLI 431 (formerly 459) (1½, formerly 3) COMPARATIVE POLITICAL ANALYSIS (seminar course)

Critical perspectives on the politics of advanced industrial societies with a focus on evolving state-society relations. Topics include the fate of social democracy, political parties, social movements, structures of class, race and gender and their evolution in a changing political economy. F(3-0)

### POLI 433 (formerly 466) (1½ or 3) ISSUES IN POLITICS

An analysis of one or more selected political issues, such as aboriginal rights, feminism, resource ownership, political violence, or nationalist movements. (May be taken more than once on different topics up to a maximum of 3 units with permission of the Chair of the Department) FS(3-0)

## GROUP IV — INTERNATIONAL RELATIONS

### POLI 340 (1½, formerly 3) INTERNATIONAL STUDIES

The historical development of the modern states system with reference to its changing social, economic, and political environments, and to related theoretical developments. S(3-0)

### POLI 343 (1½) INTERNATIONAL ORGANIZATION

The nature and function of international and regional governmental and non-governmental organizations. F(3-0)

### POLI 344 (1½, formerly 3) INTERNATIONAL POLITICAL ECONOMY

The politics of international economic relations in trade, investment, finance and macroeconomic policies from a variety of theoretical perspectives. F(3-0)



**POLI 346 (formerly 446) (1½) CANADIAN FOREIGN POLICY**

The foreign policy-making process in Canada, including alternative explanations of specific policies. NO(3-0)

**POLI 347 (1½) DISCOURSES OF WORLD POLITICS**

Contemporary debates about the nature and location of political community in relation to both the historical practices of state sovereignty and claims about the increasingly global context of political life. F(3-0)

**POLI 348 (1½) INTERNATIONAL SECURITY**

Conceptual and practical issues of security in international politics, including such topics as: the causes of violent international conflict, non-military threats to security, national security policies, cooperative international security, and alternatives to state-centered security. S(3-0)

**POLI 442 (formerly 342) (1½) INTERNATIONAL LAW (seminar course)**

Introduction to the theory, practice and political foundations of international law. (Prerequisite: 343 or permission of the instructor) F(3-0)

**POLI 444 (1½) ADVANCED TOPICS IN INTERNATIONAL POLITICAL ECONOMY (seminar course)**

Selected contemporary issues in the global political economy in the light of changing technology, patterns of production, national power and competitiveness, and the growth of international cooperation. (Prerequisite: POLI 344 or permission of the instructor) S(3-0)

**\*POLI 445 (1½, formerly 3) FOREIGN POLICY ANALYSIS (seminar course)**

An examination of foreign policy and policy-making processes in one or more selected countries. NO(3-0)

**POLI 447 (1½) INTERNATIONAL RELATIONS IN ASIA (seminar course)**

Relations among major political actors of Asia east of Iran, including questions of security, economics, reunification (China-Taiwan and the Korean peninsula), strategy, and the relations of these states with the US and the USSR. Each country will be examined from the perspective of its domestic politics, foreign policy, and political economy. (A course on Asian politics or modern Asian history is strongly advised) (Not open to students with credit in 433, "Issues in Politics: International Relations in Asia") NO(3-0)

**GROUP V — PUBLIC ADMINISTRATION****\*POLI 350 (3) PUBLIC ADMINISTRATION**

An introduction to the evolution of the administrative process in government, the theory, and practice of administrative decision making, and a review of issues in organizational structure, financial and personnel administration, budgeting and administrative responsibility. NO(3-0)

**POLI 351 (1½) PUBLIC POLICY ANALYSIS**

A consideration of various methods of explaining and evaluating public policies, with particular attention to the techniques employed by governments. NO(3-0)

**POLI 352 (1½) THE PUBLIC SERVICES**

An examination of the role of public servants in the modern state, with emphasis on selection, appointment, training and human relations; the political rights of public servants; and the role of public service unions. NO(3-0)

**POLI 353 (1½) THE POLITICS AND MANAGEMENT OF PUBLIC EXPENDITURE**

An examination of the budgetary processes within different levels of government, of the various forms of budgeting, and of the political and administrative factors influencing public expenditure outcomes. NO(3-0)

**POLI 425 (formerly 325) (1½) LAW AND PUBLIC POLICY (seminar course)**

An analysis of the structures and practices of the courts, the legal profession, the police and related legal institutions in Canada. NO(3-0)

**POLI 451 (1½) THE POLITICS OF ORGANIZATIONAL STRUCTURE AND INSTITUTIONAL DESIGN (seminar course)**

The political impact that organizational and institutional structures have on public policy. Readings will focus on theories of institutional autonomy, the design of organizations, and the administration of the policy process. (Prerequisite: 350 or permission of the instructor) NO(3-0)

**POLI 456 (1½) THE POLITICS OF INFORMATION (seminar course)**

A comparative analysis of the theoretical and policy issues surrounding the collection, treatment and disclosure of government information. Topics include: surveillance, privacy, access to information, press freedom and censorship. S(3-0)

**POLI 457 (1½) THE POLITICS OF ENVIRONMENTAL AND NATURAL RESOURCE POLICY (seminar course)**

An examination of the formation and implementation of environmental and natural resource policy, with an emphasis on British Columbia. Alternative approaches to the analysis of the policy making processes will be considered. (Not open to students with credit in 435, 456A, or 456B) NO(3-0)

**POLI 458 (1½) PUBLIC POLICY AND GLOBAL ENVIRONMENTAL ISSUES (seminar course)**

The comparative analysis of different nation states' policy responses to environmental issues such as global warming, population control and deforestation. The impact of differences in governmental structure, political cultures, and economic conditions will be examined. A sample of nations will be selected to allow exploration of different explanations of public policy determination. (Prerequisite: permission of the instructor) NO(3-0)

**GROUP VI — CANADIAN GOVERNMENT AND POLITICS**

All courses in this Group except 470 require credit in 100 or its equivalent as a prerequisite.

**POLI 320 (3) THE CANADIAN CONSTITUTION**

An analysis of Canadian constitutional law and practice; parliamentary government, the division of power, judicial authority, the Charter of Rights and Freedoms, constitutional amendment and related problems; some comparisons with other jurisdictions will be made. (Prerequisite: 100 or 220) Y(3-0)

**POLI 360 (1½) CANADIAN FEDERALISM AND PUBLIC POLICY**

An examination of the constitutional, political, social, economic, and cultural bases of Canadian federalism, the dynamics of contemporary intergovernmental relations, and the impact of the federal system on public policy. F(3-0)

**POLI 361 (1½) PARTIES AND PRESSURE GROUPS IN CANADA**

An examination of political parties, pressure groups, and theories of representation in the Canadian context, with emphasis on the development, structure and ideologies of the major parties. S(3-0)

**POLI 362 (1½) COMPARATIVE PROVINCIAL POLITICS (seminar course)**

A comparative analysis of political structures and processes in the Canadian provinces, and the variations in their forms of political behaviour. NO(3-0)

**POLI 465 (3) BRITISH COLUMBIA GOVERNMENT AND POLITICS**

An examination of the political institutions and processes of government in British Columbia seen in the context of the political and economic development of the province, its political cleavages and party system, and the formation of provincial public policy. Y(3-0)

**POLI 468 (1½) THE POLITICS OF FEMINISM IN CANADA (seminar course)**

An examination of contemporary women's movements in Canada, their strategies, diversity and commonalities. A reconceptualization of social protest from the perspective of women's political involvement and organizing for change. (Not open to students with credit in 433, "Issues in Politics: The Politics of Canadian Feminism") F(3-0)



**\*POLI 470 (3) GOVERNMENT IN CANADA**

A course designed for students in other disciplines who would like to gain some understanding of the structure and functioning of government in Canada. It will cover such topics as parties and political behaviour, federalism, the bureaucracy and the parliamentary process. This course will be of particular interest to students in the Faculties of Education, Human and Social Development, Fine Arts, and Engineering. (Not open to students with credit in 100. Not open for credit to Political Science Major and Honours students) NO(3-0)

**GROUP VII — HONOURS****POLI 490 (1½ or 3) DIRECTED READING**

Directed reading and/or research for Honours students under the supervision of an available faculty member may be offered to meet special

circumstances. No more than 3 units of directed reading may be applied toward degree requirements and, except with the approval of the Department, such units will not be applied toward the distribution requirement. (Not open to Majors except with special permission of the Department) (This course is generally not offered in Summer Studies)

**POLI 499 (3) HONOURS SEMINAR AND ESSAY**

A fourth year seminar for Honours students only, which will deal with selected problems of the discipline and will help students to develop a critical approach to specialized materials. The seminar will also assist students in the preparation of a graduating essay. The essay must conform to acceptable standards of style and format, and must be submitted before the end of second term classes. (3-0)

**DEPARTMENT OF PSYCHOLOGY**

Richard B. May, B.A. (Whitman), M.A., Ph.D. (Claremont), Professor and Chair of the Department  
 Janet Beavin Bavelas, A.B., A.M., Ph.D. (Stan.), Professor  
 Daniel N. Bub, B.Sc. (Lond.), M.A., Ph.D. (Roch.), Professor  
 Michael E. Corcoran, B.A. (Northw.), M.A., Ph.D. (McG.), Professor  
 Louis D. Costa, A.B. (C.C.N.Y.), M.A., Ph.D. (Col.), Professor  
 Roger A. Dixon, B.A. (N. Colo.), M.A. (Chic.), M.S., Ph.D. (Penn. State), Professor  
 Robert D. Gifford, B.A. (Calif., Davis), M.A., Ph.D. (S. Fraser), Professor  
 David F. Hultsch, B.A. (Lycoming Coll.), M.A., Ph.D. (Syr.), Lansdowne Professor of Psychology  
 Michael E.J. Masson, B.A. (Brit. Col.), M.A., Ph.D. (Colo.), Professor  
 Catherine A. Mateer, B.A., M.Sc. (Wis., Madison), Ph.D. (W. Ont.), Professor and Director of Clinical Training  
 Clare K. Porac, B.A. (Duquesne), M.A., Ph.D. (New School for Soc. Res.), Professor  
 Esther H. Strauss, B.A. (McG.), M.A. (Northeastern), M.Ed. (Bost.), Ph.D. (Tor.), Professor  
 Charles W. Tolman, B.S., M.S., Ph.D. (Wash.), Professor  
 Loren E. Acker, A.A., B.A., M.A., Ph.D. (Calif., L.A.), Associate Professor  
 Pam Duncan, B.A. (Wis. St.), M.A. (Chic.), Ph.D. (Wis.), Associate Professor  
 Nancy L. Galambos, B.S. (N.Y. St., Cortland), M.S., Ph.D. (Penn. St.), Associate Professor  
 Bram C. Goldwater, B.A. (McG.), M.A. (Corn.), Ph.D. (Bowling Gr.), Associate Professor  
 Roger E. Graves, B.S., Ph.D. (M.I.T.), Associate Professor  
 Michael A. Hunter, B.A. (S. Fraser), M.A. (Wat.), Ph.D. (S. Fraser), Associate Professor  
 D. Stephen Lindsay, B.A. (Reed Coll.), M.A., Ph.D. (Prin.), Associate Professor  
 Caroline L. Collins, A.B. (Calif., L.A.), Ph.D. (Stan.), Assistant Professor  
 Marion F. Ehrenberg, B.A. (McG.), M.A., Ph.D. (S. Fraser), Assistant Professor  
 Helena Kadlec, B.Sc., M.A. (Man.), Ph.D. (Purdue), Assistant Professor  
 Kimberly A. Kerns, B.A. (Colo.), Ph.D. (U. of Health Sciences/Chic. Med. Sch.), Assistant Professor  
 C.A. Elizabeth Lütis, B.A. (St. F.X.), M.A. (Alta.), Ph.D. (Iowa St.), Assistant Professor  
 Lorne K. Rosenblood, B.S. (Case West. Res.), M.A., Ph.D. (Ohio St.), Assistant Professor  
 Marsha G. Runtz, B.Sc., M.A., Ph.D. (Man.), Assistant Professor  
 Ronald W. Skelton, B.Sc. (Bishop's), M.A. (Conc.), Ph.D. (Brit. Col.), Assistant Professor  
 Martin S. Smith, B.A. (S. Fraser), M.A., Ph.D. (York), Senior Instructor  
 Thomas Allen, B.Sc. (U. of Vic.), Programmer Analyst  
 Morag M. MacNeil, B.A. (U. of Vic.), Administrative Officer  
**Visiting, Adjunct and Cross-listed Appointments:**  
 Alan L. Bass, M.B.B.S. (Durham), D.Phys.Med. (R.C.S., England), Adjunct Professor (1993-95)  
 Peter C. Dodwell, B.A., D.Phil. (Oxon), Adjunct Professor (1993-95)

Prem S. Fry, M.A. (Agra), M.A. (Michigan), Ph.D. (Penn.), Visiting Professor (1993-95)  
 Fouad A. Hamdi, M.D. (Alexandria), Ph.D. (Edin.), Honorary Professor  
 John W. MacDonald, B.A. (Detroit), M.S., Ph.D. (Wyo.), Adjunct Professor (1992-96)  
 Graham S. Saayman, B.A., B.A. (Natal), M.A. (McM.), Ph.D. (Lond.), Adjunct Professor (1994-96)  
 Kenneth R. Thornton, B.Sc., M.B.Ch.B. (Leeds), F.R.C.Psych., Visiting Professor (1993-95)  
 Ichiro Tofukuji, B.A., M.A., Ph.D. (Keio), Visiting Professor (1994-95)  
 Verna-Jean Amell, B.A. (Alta.), M.A., Ph.D. (Ott.), Adjunct Associate Professor (1993-96)  
 Alinda Friedman, B.A. (New York), M.A., Ph.D. (Colo.), Visiting Associate Professor (1994-95)  
 Anne MacGregor, B.A. (Car.), M.A. (Vanderbilt), Ed.D. (Brit. Col.), Adjunct Associate Professor (1993-96)  
 Bruce Monkhouse, B.A., M.A., Ed.D. (Alta.), Adjunct Associate Professor (1993-96)  
 Jean A. Saint-Cyr, B.A. (McG.), M.A., Ph.D. (Roch.), Adjunct Associate Professor (1992-96)  
 Bernice M. Seyfort, B.A., Ph.D. (U. of Vic.), Adjunct Associate Professor (1993-96)  
 Roxanne L. Still, B.A. (San Fran.), M.A., Ph.D. (Ariz.), Adjunct Associate Professor (1993-96)  
 Joyce L. Ternes, B.A. (Wat.), M.A., Ph.D. (Brit. Col.), Adjunct Associate Professor (1993-96)  
 Barry G. Young, B.A. (Brit. Col.), M.A. (Regina), Ph.D. (Lond.), Adjunct Associate Professor  
 Dorothy Edgell, B.A. (Birm.), M.A., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1992-96)  
 Adèle Hern, B.A., M.A., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1992-96)  
 Michael Joschko, B.Sc. (McM.), M.A., Ph.D. (Windsor), Visiting Associate Professor (1994-96)  
 Alexander Moll, M.B.Ch.B. (Cape Town), Adjunct Professor (1994-96)  
 Kathleen M. Montgomery, B.A. (Mass.), M.A., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1993-96)  
 Robin Routledge, M.D. (Calg.), Adjunct Associate Professor (1994-96)  
 Mel Stangeland, B.A., M.Ed. (Calg.), Ph.D. (U. of Vic.), Adjunct Assistant Professor (1992-96)

**GRADUATE PROGRAMS**

For information on studies leading to the M.A., M.Sc., and Ph.D. degrees, see page 354.

**LIMITATION ON ENROLLMENT**

Students are advised that because of limited staff and facilities, it may be necessary to limit enrollment in certain courses. Course enrollment limits will be imposed during registration. Students will be admitted to psychology courses only on the basis of stated prerequisites and priorities.



## MAJOR, HONOURS, AND GENERAL PROGRAMS

**NOTE:** The following regulations apply to students registered at UVic for their 1st, 2nd, 3rd, or 4th year in or after the fall of 1991. ALL OTHER STUDENTS SHOULD FOLLOW THE REGULATIONS IN THE 1990-1991 CALENDAR.

The Department of Psychology offers three undergraduate programs of study. The Major program requires specialization in Psychology in the last two years of the program, and is designed to permit students to pursue a variety of professional and business career options requiring baccalaureate level training. This program will enable students to proceed to graduate study or professional training if sufficiently high standing is obtained. The Honours program is recommended for students planning to do graduate work in scientific or professional psychology. Students in the Major and Honours programs may proceed to either a B.A. or B.Sc. degree in Psychology. The General program is available for students who seek a general background in preparation for entry into other fields. The choice among the Major, Honours, or General programs should be made as early as possible, with the help of an Arts and Science advisor. Graduation in the Honours program requires that students be admitted to the program at the end of the third year of study, although prospective honours students are encouraged to express their interest during their third year.

**NOTE:** Any students planning to apply for graduate studies should plan to write the Graduate Record Examination at the end of their third year of undergraduate work or during the fall of their fourth year. Applications must be received in Princeton, NJ at least 6 weeks prior to the time of writing. For more information including examination schedules, ask for a GRE Registration Bulletin from Counselling Services.

### Major Program Requirements (Total of 60 units)

#### Bachelor of Arts (B.A.) Degree

##### Psychology Requirements:

- 100A/B, 201, 210, and 215A with a grade of at least C+ in each of 100A/B, and a grade point average of at least 3.5 in 201, 210, and 215A and no grade lower than C in 201, 210, and 215A. It is strongly recommended that these courses be taken during the first two years of a student's program because no more than 6 units of upper level credit may be counted toward the Major or Honours degree before the 100A/B, 201, 210, and 215A grade requirements are satisfied. (See Note 1.)
- 300A and 300B with a grade of not less than C in either course, plus an additional 12 units of psychology numbered beyond 300 with at least 1.5 of these units taken from each of the following groups (defined in Note 2): developmental; biological/neuropsychology; learning/cognition/perception; personality/abnormal; social/environmental.

##### Requirements outside Psychology:

- English composition (3 units chosen from ENGL 115, 116, 121, 122, 215, or 225).

(At least 1.5 units of English composition must be completed before more than 6 units of psychology courses numbered 300 and above may be counted toward the Major or Honours degree. See Note 1.)

- Mathematics (1.5 units chosen from MATH 100, 102, or 151).
- Biology (3 units chosen from BIOL 101 or 150A and 150B).
- Philosophy (1.5 units; 100, 201, 203, 220, 222A, 222B, 320, 269, 306, 310, 342A, 414, or 418 is recommended).
- Anthropology, Economics, Environmental Studies, or Political Science (3 units in any combination).
- 9 additional units from the Humanities and/or Fine Arts as specified in Note 3.

##### Electives:

At least 15 units, in any combination, chosen from courses approved for credit by the Faculty of Arts and Science.

#### Bachelor of Science (B.Sc.) Degree

##### Psychology Requirements:

- 100A/B, 201, 210, and 215A with a grade of at least C+ in each of 100A/B, and a grade point average of at least 3.5 in 201, 210, and 215A and no grade lower than C in 201, 210, and 215A. It is strongly recommended that these courses be taken during the first two years of a student's program because no more than 6 units of upper level credit may be counted toward the Major or Honours degree before the 100A/B, 201, 210, and 215A grade requirements are satisfied. (See Note 1.)
- 300A and 300B with a grade of not less than C in either course, plus an additional 12 units of psychology numbered beyond 300 with at least 1.5 of these units taken from each of the following groups (defined in Note 2): developmental; biological/neuropsychology; learning/cognition/perception; personality/abnormal; social/environmental.

##### Requirements outside Psychology:

- English composition (3 units chosen from ENGL 115, 116, 121, 122, 215, or 225).

(At least 1.5 units of English composition must be completed before more than 6 units of Psychology courses numbered 300 and above may be counted toward the Major or Honours degree. See Note 1.)

- Mathematics (1.5 units chosen from MATH 100, 102, or 151).
- Biology (3 units chosen from BIOL 101 or 150A and 150B).
- Philosophy (1.5 units; 100, 201, 203, 220, 222A, 222B, 320, 269, 306, 310, 342A, 414, or 418 is recommended).
- Anthropology, Economics, Environmental Studies, or Political Science (3 units in any combination).
- 9 additional units from the Natural Sciences as specified in Note 4.

##### Electives:

At least 15 units, in any combination, chosen from courses approved for credit by the Faculty of Arts and Science.

### Honours Program Requirements (Total of 63 units)

Admission to the Honours program requires (a) a minimum of 6.50 grade point average in all Psychology courses and a minimum 4.00 grade point average in nonpsychology courses, (b) written agreement from a thesis supervisor, and (c) permission of the Honours Advisor. Students interested in the program should consult with the Advisor during their third year. They should also talk to potential thesis supervisors no later than May 31 prior to the fall term in which they would register in 499. Prospective honours students must complete the honours application form at the Arts and Science Advising Centre (Clearihue A117, Calendar page 41). This requires a statement regarding consultation with proposed supervisors and must be submitted to the Advisor by June 1. Based on these May applications, supervisors will make admission decisions about Honours students no later than the beginning of TREG (in late June). Students needing summer session courses to qualify should see the Advisor. Consistent with the regulations of the Faculty of Arts and Science, students should complete the requirements for an Honours Program in four academic years. In certain cases an extension to five years may be recommended, but students must complete a minimum of 12 units in the winter session in which they complete the honours thesis. Requests for extensions should be made through the Honours Advisor.

Course requirements for a B.A. or B.Sc. in the Honours program are the same as for the Major program with the following exceptions. Students must complete an additional 3 units of Psychology courses numbered above 300 (bringing their total program requirements to 63 units), and their courses must include Psychology 400A, 400B or 401, and 499.

To graduate with an Honours degree, a student must have a minimum 4.00 grade point average for all work completed outside the Department.

First Class Honours will be awarded to students who obtain:

- a graduating average of at least 6.50
- a grade point average of at least 6.50 for 300 and 400 level Psychology courses
- grade of at least A- in 499.



Second Class Honours will be awarded to students who obtain:

- (a) a graduating average of at least 3.50
- (b) a grade point average of at least 5.50 for 300 and 400 level Psychology courses
- (c) a grade of at least B- in 499.

A student who obtains a first class average in all 300 and 400 level Psychology courses but a second class grade in 499 will have the option of receiving a B.A. or B.Sc. with First Class Major in Psychology or Second Class Honours. A student who achieves a grade lower than B- in 499 will graduate under the Major program provided all other requirements for the degree are fulfilled. The submission date for the thesis in Psychology 499 is the last day of classes.

**General Program Requirements** (Total units specified by the Faculty of Arts & Science)

**Psychology Requirements**

- (a) Psychology 100A/B and 210
- (b) 9 units of Psychology courses numbered 300 and above with at least 1.5 of these units taken from each of the following groups (defined in Note 2): developmental; biological/neuropsychology; learning/cognition/perception; personality/abnormal; social/environmental.

**Requirements outside Psychology:**

The requirements of the Faculty of Arts & Science (see page 41).

#### Notes

**Note 1:** No more than 6 units of Psychology courses numbered 300 and above that are taken prior to the attainment of the required G.P.A. in 100A/B, 201, 210, and 215A or prior to 1.5 units of English composition, may be counted toward a Major or Honours Program. (In other words, additional courses taken before this requirement is met *will not be counted toward the Major or Honours degree*.)

**Note 2:** Distribution of requirements within Psychology are defined as follows:

- (a) Bio/Neuropsychology: 315, 323, 345A, 345B, 415, 423, 424.
- (b) Learning/Cognition/Perception: 311A, 311B, 312, 313, 317A, 317B, 413.
- (c) Social/Environmental: 331, 334A, 334B, 340, 350, 370A, 370B, 431A, 431B, 431C, 431D, 431E.
- (d) Developmental: 335, 336, 337, 339, 342, 435A, 435B, 435C, 435D, 435E, 435F.
- (e) Personality/Abnormal: 330, 338, 414, 430, 432, 436.

**Note 3:** Humanities and Fine Arts courses for the purposes of this program are defined as Chinese, Classical Studies, English, French, German, Greek, History, Italian, Japanese, Latin, Medieval Studies, Pacific Studies, Philosophy, Russian, Serbo-Croatian, Slavonic, Spanish, Women's Studies, and the Fine Arts courses approved for credit by the Faculty of Arts and Science (page 44).

**Note 4:** Natural Science courses for the purpose of this program are defined as Astronomy, Biochemistry, Biology, Chemistry, Geology, Marine Science, Mathematics, Microbiology, Physics, and Statistics.

## RECOMMENDED ELECTIVES

### First and Second Years:

Students who plan to take 315, 323, 415, 423, or 424 are encouraged to take BIOL 150A and 150B; in addition BIOL 207 and 320 or 305 are recommended.

### Third and Fourth Years:

The Department of Psychology recognizes the diversity of career orientations which might lead a student to concentrate in Psychology. Accordingly it suggests the following guidelines for upper level courses.

Students planning to enter social services — mental health, school psychology, social work, parole, child care and related fields: 311A or 311B or 313, 315, 330, 331, 430 or 432, 450 and at least 1½ units from 335, 336, 337, 338 and 339.

Students planning careers in business and industry, civil service, government, personnel work: 311A or 311B, 330, 331, 334, 401, 414, 432, plus courses in other social sciences such as ECON 100, POLI 100, SOCI 319, 321.

Majors who are planning to pursue advanced degrees in Psychology are advised to take 400A and 400B.

Frequently chosen third and fourth year nonpsychology electives include SOCI 301, 304, 319, 325, 383; ED-D 316, 317, 417; BIOL 320, and PHIL 342A and 342B.

**NOTE:** The Bachelor's degree in Psychology is intended primarily to prepare the student for further advanced study in psychology or related fields (Education, Social Welfare, etc.), and in no way implies professional competence as a psychologist without such advanced training. Although students may on occasion find employment of a psychological nature with an undergraduate degree, it is expected that further preparation, perhaps in the form of in-service training, will normally be required by employers.

### Individual Studies and Directed Readings:

During the Winter Session the Department of Psychology may give permission for individual studies and directed readings to be taken under the course numbers 390 and 490. Other course numbers are not offered as individual studies or directed readings at any time. During May-August, 390 and 490 are available only to students with an overall grade point average of 5.50 or higher in the last 15 units completed. Students seeking an exemption from these restrictions must make a formal application to the departmental undergraduate advisor.

## UNDERGRADUATE COURSES

Students should consult the Department concerning courses offered in any particular year.

**NOTE:** 3 units of 100 (or equivalent) are prerequisite for all courses numbered 300 and above unless an exemption is specifically stated in the course description. Second year courses are open without the 100 prerequisite, though most require at least second year standing; nonetheless, it is recommended that the student first take 100A and 100B whenever possible. Students are cautioned that enrollment in a second year psychology course without 3 units of 100 (or equivalent) will normally mean that they will be required to take 100A and 100B at a later date in order to qualify for admission to a course at the 300 or 400 level.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### PSYC 100A (1½) (formerly half of 100) GENERAL PSYCHOLOGY

An introduction to the concepts, methods and history of modern psychology. Topics include brain processes, perception, cognition, motivation, learning, and research methods. The purpose of the course is to present a broad survey; however, research demonstrations and applications will be employed to illustrate some topics. A grade of at least C+ is required for the Majors or Honours programs. **FK(3-0)**

### PSYC 100B (1½) (formerly half of 100) GENERAL PSYCHOLOGY

An introduction to the concepts, methods and history of modern psychology. Topics include personality, social processes, psychological development, psychological testing, clinical psychology and behaviour pathology. The purpose of this course is to present a broad survey; however, research applications will be employed to illustrate some selected topics. A grade of at least C+ is required for the Majors or Honours programs. **SK(3-0)**

### PSYC 201 (formerly half of 200) (1½) INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY

Introduction to basic research techniques in experimental psychology; emphasis on the conceptual rather than the statistical rationale underlying various research strategies. Areas include the nature of variables, types of measurement, how to generate and test hypotheses, types of validity, and how to interpret and report results. Laboratory exercises and class demonstrations on the processes involved in conducting empirical research. (*Prerequisite:* 100 or equivalent, with a grade of at least C+; see also Note 1 above) **FSK(3-0)**



**PSYC 210 (3) THE HISTORY OF PSYCHOLOGY**

This course is designed to provide students with the background necessary to facilitate a full appreciation of upper level courses. Current problems in psychology will be examined within a historical context by reference to outstanding past and present persons and issues. (*Pre- or corequisite:* 100; See also Note 1 above) YK(3-0)

**PSYC 215A (formerly half of 230) (1½) INTRODUCTION TO BIOLOGICAL PSYCHOLOGY**

This course will deal with basic concepts of brain function in relation to behaviour. Topics will include basic aspects of neuronal functions, neuroanatomy, and behavioural genetics, as well as the functioning of the nervous system in relation to sensation, motor output, and at least one other aspect of behaviour. (*Prerequisite:* 100 or at least second year standing. See also Note 1 above.) FK(3-0)

**PSYC 250 (1½) INTRODUCTION TO APPLIED BEHAVIOURAL PSYCHOLOGY**

A survey of behaviour modification and biofeedback treatment technologies; behaviouristic approach is taken on such topics as sexual dysfunction, phobias and anxieties, weight control, energy conservation, pollution, employment problems, institutional and clinical treatment, public health and medical care, and alcohol and drug dependency; examples of successful programs and associated research will be pertinent to students beginning careers in Human and Social Development, Law, Public Administration, Biology, Education, Medicine, Health Sciences and Social Sciences and those intending to take 311A, 311B, 337 or 338. S(3-0)

NOTE: Students enrolled or planning to enroll in the Majors or Honours program in Psychology should consult Note 1 above before enrolling in more than 6 units of upper-level Psychology courses.

**PSYC 300A (formerly half of 300) (1½) STATISTICAL METHODS IN PSYCHOLOGY**

Brief review of research methodology; univariate description, bivariate description, and an introduction to probability and inferential statistics as applied in Psychology. Introduction to microcomputer software and computer based analyses of the statistical procedures covered in the course. (*Prerequisites:* At least 1½ units of 100 with a grade of at least C+; 201 with a grade of at least C; Math 100, or 120, or 151, or 102) FK(3-1)

**PSYC 300B (formerly half of 300) (1½) STATISTICAL METHODS IN PSYCHOLOGY: II**

The course contains a brief review of the topics covered in 300A and deals with statistical analysis procedures for two-group and multi-group experimental designs. The focus is on t-tests and analysis of variance. The differences between repeated measures and independent groups designs and analyses are emphasized. Students are expected to analyze an experimental data set using the appropriate statistical procedures, and to prepare a research report. (*Prerequisite:* 300A with a grade of at least C.) (See Credit Limit, page 18) SK(3-1)

**PSYC 311A (formerly half of 311) (1½) CONDITIONING AND LEARNING: COGNITIVE EMPHASIS**

A critical survey of the basic experimental findings and theories of the learning process with emphasis on the conditions for learning, retention and transfer of learning; topics include classical and operant conditioning, reinforcement, generalization and discrimination, and an introduction to concept learning; this course will provide useful background for 313. (311A is not a prerequisite for 311B) (*Prerequisites:* 100 and 3rd year standing) NO(3-0)

**PSYC 311B (formerly half of 311) (1½) CONDITIONING AND LEARNING: BEHAVIOURAL EMPHASIS**

An analysis of the acquisition, maintenance and modification of behaviour in terms of observational environmental determinants. Topics include respondent and operant conditioning; positive and negative reinforcement; extinction; shaping; reinforcement schedules; generalization and discrimination; escape and avoidance; punishment. Includes a review of basic animal research, as well as training to apply behavioural principles to understand everyday human behaviour. (311A is not a prerequisite for 311B. This course is the preferred prerequisite for 312.) FK(3-0)

**PSYC 312 (1½) ADVANCED CONDITIONING AND LEARNING: BEHAVIOURAL EMPHASIS**

This course follows Psychology 311B, examining some added complexities involved in phenomena covered there, as well as introducing some new topics, examples of which might include behavioural approaches to such "higher level processes" as attention, concept formation, and verbal behaviour; current controversies regarding the nature of reinforcement; and interrelations among instinctive, respondent, and operant behaviour. (*Prerequisite:* One of 250, 311A, 311B, or 337) S(3-0)

**PSYC 313 (1½) (formerly 313A and 313B) COGNITIVE PSYCHOLOGY**

An introduction to information processing analyses of mental processes. Topics include pattern recognition, attention, memory systems, language processing, concept formation, problem solving, reasoning and decision making. Relationships between these topic areas will be described. Emphasis will be placed on understanding theories and relevant research in each area, and on the general relationship between research results and theory development. Some important phenomena and methods will be illustrated with classroom demonstrations. (*Prerequisite:* 100 and at least third year standing.) FSK(3-0)

**PSYC 315 (3) INTRODUCTION TO NEUROPSYCHOLOGY**

An introduction to neuroanatomy and neurophysiology as related to human and animal brain function and behaviour. Consideration of the contributions of neurology, experimental and clinical neuropsychology to the understanding of normal cognitive and affective functioning and of disturbances resulting from brain damage in selected areas. Demonstrations involving selected patients with cerebral lesions at the Royal Jubilee Hospital will be arranged during the second term. (*Prerequisite:* 215A) Y(2-2)

**PSYC 317A (formerly half of 317) (1½) SENSATION AND PSYCHOPHYSICS**

This course covers the physical basis of human sensory processing. The physiology of the visual, auditory and minor senses is covered with an emphasis on functional models of sensory system operation. Course material also includes topics related to the measurement of sensory experience. The four classic psychophysical problems of detection, recognition, discrimination and scaling are covered with an emphasis on their mathematical and statistical basis. (*Prerequisite:* 100) F(3-0)

**PSYC 317B (formerly half of 317) (1½) HUMAN PERCEPTION**

An introduction to how our perceptual world is constructed from the input provided by our physical sensory structures. Topics include the construction of spatial percepts, the perception of form and art, and individual differences in perceptual experience. The emphasis is on the hypothesis testing aspects of our perceptual experience. (*Prerequisites:* 100 and 215A or 317A) S(3-0)

**PSYC 323 (1½) ADVANCED BIOPSYCHOLOGY**

This is an advanced course on the physiological basis of behaviour. The initial portion will cover the fundamentals of neurophysiology and neuroanatomy from a functional perspective, with an emphasis on the anatomy of the human nervous system. The latter portion will examine the physiological basis of behaviours through review of contemporary research in areas such as sleep, reproduction, aggression, ingestion, learning and memory, motivation, and mental disorders. (*Prerequisite:* 215A) NO(3-0)

**PSYC 330 (1½, formerly 3) PERSONALITY**

An introduction to personality theory and its applications. A survey of several major strategies followed in conceptualizing personality, e.g., psychoanalytic, dispositional plus emphasis on measurement of personality, current research, and approaches to personality change. FSK(3-0)

**PSYC 331 (3) SOCIAL PSYCHOLOGY**

A survey of theories and findings in the following areas: social perception, socialization, social motivation, attitude development and change, interpersonal interaction, and group processes. YK(3-0)

**PSYC 332 (1½) HEALTH PSYCHOLOGY**

A study of health issues from the standpoint of biological, psychological, and social factors acting together. Topics include health promotion, approaches to health-behaviour change, stress and coping, patient-practitioner interaction, pain, psychological issues in chronic and terminal illness, death and bereavement, the role of psychological factors in disease and treatment. (*Prerequisite:* 100) S(3-0)



**PSYC 334A (formerly half of 334) (1½) PERSONNEL AND ORGANIZATIONAL PSYCHOLOGY**

This course covers research and theory in personnel selection, placement, training, motivation, satisfaction, leadership, productivity and communication. (Not open to students with credit in COM 120 or COM 220) FS(3-1)

**PSYC 334B (formerly half of 334) (1½) WORKPLACE AND CONSUMER PSYCHOLOGY**

This course covers research and theory on the relationship between employees and the work setting; it also introduces consumer psychology. The impact of workplace technology, stress, noise, light and office design on productivity, alcohol and drug abuse and safety behaviour is considered. Research in and methods of investigating consumer behaviour and advertising are surveyed. S(3-1)

**PSYC 335 (1½) INFANT AND CHILD DEVELOPMENT**

Overview of research examining psychological processes from conception through about 12 years of age. Topics will include prenatal development, physical growth, perceptual and cognitive processes, language acquisition, personality development, and social processes. (Not open to students with credit in 333A) (Prerequisite: 100) FSK(3-0)

**PSYC 336 (1½) ADOLESCENT DEVELOPMENT**

Overview of research examining psychological processes during adolescence. Topics will include physical development, cognitive processes, emotional development, social processes, and psychopathology. (Not open to students with credit in 333A) (Prerequisite: 100)FK(3-0)

**PSYC 337 (1½) CHILD BEHAVIOURAL DEVELOPMENT: PRINCIPLES AND ANALYSIS**

This course will cover the basic principles of behavioural development from infancy to adulthood. The emphasis will be upon a critical analysis of the individual child's behaviour as being reciprocally a product of, and a determiner of, particular child rearing and institutional/educational practices. F(3-0)

**PSYC 338 (1½) CHILD BEHAVIOURAL DEVELOPMENT: ASSESSMENT AND MODIFICATION**

This course will extend the basic principles of behaviour to areas of application in home and institutional settings for infants, children and adolescents. The emphasis will be upon a critical analysis of various behaviour modification programs, their relationship to behaviouristic developmental theory, and the methodological requirements for implementing such programs. (Prerequisite: 311B or 337 or consent of instructor) SK(3-0)

**PSYC 339 (1½) ADULT DEVELOPMENT AND AGING**

Overview of research examining psychological processes during adulthood and aging. Topics will include biological processes, perceptual and cognitive processes, personality and social processes, sources of stress, psychopathology, and death. (Not open to students with credit in 333B) (Prerequisite: 100) FSK(3-0)

**PSYC 340 (1½) INTERPERSONAL COMMUNICATION**

The course examines human communication, with particular emphasis on face-to-face interaction. The topics covered are verbal communication, nonverbal communication, interpersonal systems, and systemic approaches to psychopathology. This is a theory and research course using primary sources; it does not teach communication skills, mass communication, or applied communication. (Prerequisites: 201 and third or fourth year standing) FK(3-0)

**PSYC 342 (formerly 235) (1½) THEORIES AND METHODS IN LIFE-SPAN DEVELOPMENTAL PSYCHOLOGY**

A survey of the issues, theories and methods in the study of human psychological development across the entire span of life. Theories include organismic, mechanistic, contextual, and humanistic approaches. Methods appropriate for the study of psychological change are discussed. (Prerequisite: 201 and 210) FK(3-0)

**PSYC 345A (formerly half of 345) (1½) DRUGS AND BEHAVIOUR: BASIC PRINCIPLES**

This is an introductory course designed to review the scientific literature on drugs, behaviour, and the central nervous system. Topics include introductions to pharmacology, neuropharmacology, the experimental analysis of behaviour, and the behavioural determinants of drug action. (Prerequisite: 215A or 323) NO(3-0)

**PSYC 345B (formerly half of 345) (1½) DRUGS AND BEHAVIOUR: ADVANCED TOPICS**

General principles described in 345A are applied to families of drugs such as psychomotor stimulants, opiate analgesics, ethanol and related depressants, major tranquillizers, anolytics, phantastants, and others. Topics include effects on conditioned and unconditioned behaviours, mechanisms of tolerance and dependence, stimulus properties, self-administration, neural mechanisms of action, social implications of drug use, and therapeutic approaches to drug use. (Prerequisite: 345A) NO(3-0)

**PSYC 350 (3) ENVIRONMENTAL PSYCHOLOGY**

The course examines human interaction with the physical environment from a psychological perspective. Topics include environmental perception, cognition, and assessment; personality and environment; the dynamics of social space; the effects of temperature, sound, light and spatial arrangements in neighbourhoods, homes, schools and workplaces; psychological aspects of environmental hazards and disasters, the design of buildings, and resource management. (Prerequisite: 100 or registration in the Environmental Studies program) Y(3-1)

**PSYC 370A (LING 370A) (formerly 370) (1½) PSYCHOLINGUISTICS**

Offered in collaboration with the Department of Linguistics. A course in the psychology of language which examines the process of comprehension and production, including language and cognition, conversational discourse, and inference and semantics, among other topics. (Prerequisites: 201 and 210) F(3-0)

**PSYC 370B (LING 370B) (formerly 369) (1½) DEVELOPMENTAL PSYCHOLINGUISTICS**

Offered in collaboration with the Department of Linguistics. The course examines the biological bases of language; stage by stage acquisition of phonology, morphology, syntax, and semantics of the child's first language; and the child's developing metalinguistic abilities. Also treated are the child's growing awareness of the form and function of speech acts, as well as the discourse rules governing conversations. (Prerequisite: 370A) S(3-0)

**PSYC 390 (1½ or 3) SPECIAL PROBLEMS IN PSYCHOLOGY**

Directed independent study for the student. Complete arrangements must be made with an instructor in the Department before registering. (The maximum credit for 390 and 490 together must not exceed six units unless permission of the Chair of the department is obtained.) FSYK

**PSYC 400A (1½) ADVANCED METHODS: THE GENERAL LINEAR MODEL**

An introduction to advanced research designs and their underlying rationale. Experimental design and statistical techniques will be applied to problems in psychology. Extensive treatment will be applied to the use of the general linear model. The course will examine designs having multiple independent variables and a single dependent variable. Topics covered include correlation, multiple regression, analysis of variance and sampling. (Prerequisite: 300B and permission of the instructor) F(2-2)

**PSYC 400B (1½) ADVANCED METHODS: MULTIVARIATE ANALYSIS**

The course is a continuation of Psychology 400A to multivariate designs. Techniques used with multiple dependent variables such as factor analysis, multivariate analysis of variance and canonical correlation will be covered. In addition the historical and philosophical development of these techniques in psychological theory will be explored. (Prerequisite: 400A) S(2-2)

**PSYC 401 (1½) PSYCHOMETRIC METHODS**

This course will cover the measurement of individual differences, especially personality and ability traits. The focus will be on reliability and validity — how do we know whether, and to what degree, a psychological measure is reliable and valid? Topics include designs for estimating reliability and validity, advanced correlation, and current problems and issues in the field. (The course does not teach how to give psychological tests.) (Prerequisite: 400A) S(2-2)



**PSYC 410 (1½, formerly 3) TOPICS IN THEORY AND HISTORY OF PSYCHOLOGY**

An examination of selected issues concerning the theoretical and methodological foundations of contemporary psychological thought and practice from an historical point of view. (*Prerequisite*: 210 or permission of instructor) F(3-0)

**PSYC 413 (1½) ADVANCED TOPICS IN COGNITIVE PSYCHOLOGY**

Selected topics drawn from 313 will be examined in detail. Emphasis will be on the construction and empirical testing of theories of cognitive processes. Research projects and computer simulation model demonstrations will be used to help students learn and apply research methodology and model building techniques. (*Prerequisite*: 313) NO(3-0)

**PSYC 414 (1½, formerly 3) MOTIVATION AND EMOTION**

An examination of the psychological forces which activate, organize and direct human behaviour. Contemporary theoretical, conceptual and methodological issues will be assessed in the light of recent research findings and applications. Emphasis on experiential and social factors in the relation between emotions and motivation. (Physiological factors are studied in other courses, e.g. 423, 424) (*Prerequisites*: 201 and 210) NO(3-0)

**PSYC 415 (1½) HUMAN NEUROPSYCHOLOGY**

This course examines brain behaviour relationships by studying qualitative changes in cognitive performance following focal brain damage. The historical approach provides readings from both classical (e.g., Wernicke, Liepmann, etc.) and contemporary sources. Topics include localization of function, aphasia, agnosia, apraxia, and amnesia. Methods of clinical testing and diagnosis will be presented. (*Prerequisite*: 315 or permission of instructor) F(3-0)

**PSYC 423 (1½) ADVANCED TOPICS IN PHYSIOLOGICAL PSYCHOLOGY**

Extensive, research oriented examination of contemporary topics in physiological psychology. Topics will include the psychobiology of motivation, memory, and neural plasticity, with some emphasis on neuropharmacology. The seminar format of this course requires students to make an oral presentation and write a term paper about an area of current research. (*Prerequisite*: One of 323, BIOL 305A or B, or permission of instructor) NO(3-0)

**PSYC 424 (1½) HUMAN PSYCHOPHYSIOLOGY**

The study of the physiological correlates of human behaviour. Topics will include the autonomic nervous system; basis and principles of polygraph measurement; physiological correlates of attention and cognitive activity; the role of physiological activity in emotion; physiological effects of stress; biofeedback and meditation; and lie detection. *Recommended*: 215A or BIOL 150A/B or other background in human physiology. F(3-0)

**PSYC 430 (3) ABNORMAL PSYCHOLOGY**

Definitions and models of the behaviour disorders; study of behaviour disorders with regard to social attitudes, origins, development, manifestations, assessment and treatment. Emphasis is on both the behavioural and humanistic approaches to problems in abnormal psychology. Tentative structure of the course includes volunteer experience in the community with a community agency, or a formal term paper. YK(3-0)

**PSYC 431 (1½ to 6) ADVANCED TOPICS IN SOCIAL PSYCHOLOGY**

Intensive examination of selected social aspects of human behaviour. The course may be taken for up to 6 units, on two different topics. The topic(s) covered in any given year will be announced annually by the department before registration and will be chosen among the following:

- 431A Attitudes (*Prerequisite*: 331) NO(3-0)
- 431B Social Cognition (*Prerequisite*: 331) NO(3-0)
- 431C Social Psychology of Language (*Prerequisites*: 331, 370A) NO(3-0)
- 431D Face-to-face Interaction (*Prerequisite*: 340) S(3-0)
- 431E Environmental Psychology (*Prerequisite*: 350) F(3-0)

**PSYC 432 (1½, formerly 3) SURVEY OF CLINICAL PSYCHOLOGY**

Provides an overview of the various concepts, methods, and professional issues associated with the field of clinical psychology including the historical development of clinical psychology, the scientist and practitioner roles of the critical psychologist, current research and clinical methods, and professional/ethical issues. Open only to third and fourth year students. S(3-0)

**PSYC 435 (1½) ADVANCED TOPICS IN LIFE-SPAN DEVELOPMENTAL PSYCHOLOGY**

Intensive examination of specific processes in particular phases of the life span. No course (435A through 435F) may be taken more than once.

- 435A Infant Development (*Prerequisites*: 300A, 300B, and 333B or 335) NO(3-0)
- 435B Child and Adolescent Social and Personality Development (*Prerequisites*: 300A, 300B, and 333A or 335 or 336) S(3-0)
- 435C Child and Adolescent Cognitive Development (*Prerequisites*: 300A, 300B, and 333A or 335 or 336) NO(3-0)
- 435D Adult Social and Personality Development (*Prerequisites*: 300A, 300B, and 333B or 339) S(3-0)
- 435E Adult Cognitive Development (*Prerequisites*: 300A, 300B, and 333B or 339) NO(3-0)
- 435F Special Topics in Life-Span Development (*Prerequisites*: 300A, 300B, and 333A or 333B or 335 or 336 or 339) NO(3-0)

**PSYC 436 (1½) PSYCHOPATHOLOGY OF CHILDHOOD AND ADOLESCENCE**

A detailed study of theoretical and research approaches to the understanding of developmentally related disorders of childhood and adolescence. Emphasis will be on etiology, description and treatment of these disorders which are in specific developmental "stages", although other disorders which frequently occur during childhood/adolescence will also be considered. (*Prerequisites*: 333A or 335. One course in abnormal psychology recommended) F(3-0)

**PSYC 441 (1½ to 3) WOMEN AND PSYCHOLOGY**

The role of women in the practice of psychology and psychological research, and research related to women's issues and sex differences and similarities. The course may be taken for up to 3 units, on two different topics. The topic(s) covered in any given year will be announced annually by the department before registration and will be chosen from among the following:

- 441A Women in the History of Psychology (*Prerequisites*: 100A/B and at least third year standing) NO(3-0)
- 441B Women and the Science of Psychology (*Prerequisites*: 100A/B and at least third year standing) F(3-0)
- 441C Sex and Gender Issues in Psychology (*Prerequisites*: 100A/B and at least third year standing) S(3-0)

**PSYC 450 (1½) DEVELOPMENTAL HANDICAP AND LEARNING DISABILITIES**

A survey of prevalence, causes, research, theory and applied aspects of developmental handicap and learning disabilities in children, adolescents, and adults. Topics include training, treatment, education, integration, law and attitudes. (Open to nonpsychology students in related fields. One term paper may be required) (*Prerequisites*: 100 and either fourth year standing or written permission of the instructor) S(3-0)

**PSYC 490 (1½ or 3) ADVANCED SPECIAL PROBLEMS IN PSYCHOLOGY**

Independent study for the advanced student. Complete arrangements must be made with an instructor in the Department before registering. (The maximum credit for 390 and 490 together must not exceed six units unless permission of the Chair of the Department is obtained.) FSYK

**PSYC 499 (3) HONOURS THESIS AND SEMINAR**

Students will attend a weekly seminar which includes oral presentation of their proposed thesis research in the first term and a progress report of the research in the second term. For the remainder of the program, the students will work closely with a faculty supervisor regarding details of the written thesis which is submitted in April. (Third year students who are thinking of joining the Honours program are encouraged to attend 499.) (*Prerequisite*: Honours standing) Y(1-2-1)



## DEPARTMENT OF SLAVONIC STUDIES

Nicholas V. Galichenko, B.A., M.A. (Brit. Col.), Ph.D. (McG.), Associate Professor and Chair of the Department

Zelimir B. Juricic, B.A., M.A. (Brit. Col.), Ph.D. (Nott.), Professor  
Gunter H. Schaarschmidt, M.A. (Alta.), Ph.D. (Indiana), Professor

### Visiting, Adjunct and Cross-listed Appointments:

Zbigniew Folejewski, M.A. (Wilno), Ph.D. (Uppsala), Adjunct Professor (1993-95)

Nicholas S. Tyrras, B.A., M.A. (Wat.), Ph.D. (Brit. Col.), Visiting Assistant Professor (1994-95)

### GENERAL AND MAJOR PROGRAMS IN RUSSIAN

The Department of Slavonic Studies offers a full complement of courses in Russian (and Slavonic) Studies leading to the B.A. degree in the General or Major Programs. All students planning a program in the Department of Slavonic Studies should consult the Departmental Adviser concerning their selection of courses both within and outside the Department. Students specializing in particular programs will find that they have sufficient electives to enable them to concentrate (double Major) in a second field, in such recommended areas as History, Political Science, or a modern language. A wise selection of courses is therefore important, particularly to those students who may wish to enter graduate school, teaching, library work, government service, etc.

Students planning to take either a General or Major B.A. in Russian must have a satisfactory standing in courses at the 200 level. Students with advanced credit, or those competent in Russian, will be placed at an appropriate level. Students wishing to select Russian as a teaching area in the Faculty of Education's Secondary Curriculum should consult page 181.

### PROGRAMS IN RUSSIAN

#### GENERAL

100, 200 and 203 (or 149 and 203); nine units of Russian, Slavonic or Serbo-Croatian courses at the 300 or 400 level.

#### MAJOR

100, 200 and 203 (or 149 and 203); 302, 308A and 308B, 406, plus six additional units of Russian, Slavonic or Serbo-Croatian courses at the 300 or 400 level.

Only 3 units of courses from the following list may be taken as required courses for the Major in Russian: RUSS 301A, 301B, 304, 414; SLAV 312, 315, 340, 341, 374, 376, 415, 443.

### COURSES

Students should consult the Department concerning courses offered in any particular year.

Courses marked with an asterisk (\*) are not offered owing to financial exigency. The Department intends to offer them as soon as funding is available and enrollment is sufficient.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

#### RUSSIAN

##### RUSS 100 (3) FIRST YEAR RUSSIAN

Introduction to the fundamentals of Russian grammar; basic reading, writing and conversational skills. (Prerequisite: No prior knowledge of Russian is required) Y(3-1)

##### \*RUSS 149 (6) INTENSIVE RUSSIAN

This course is designed to cover a basic two year study of the Russian language in one year (equivalent to Russian 100 plus Russian 200) and to provide a rapid and thorough grounding in how to read, write and speak Russian, with an emphasis on making practical use of the language as early as possible. Short texts and audiovisual materials will be used to reinforce reading and comprehension and to prepare students for conversation practice. (Prerequisite: None. Students with credit for 100 may not take this course for credit. Students not making satisfactory progress will be advised to transfer to 100) NO(5-2)

##### RUSS 200 (3) SECOND YEAR RUSSIAN

A continuation of 100, this course is designed to complete the fundamentals of Russian grammar. (Prerequisite: 100) (Not open to students with credit for 149) Y(3-1)

##### RUSS 203 (3) ORAL AND WRITTEN PRACTICE

This course is designed to provide students with oral and written practice in Russian, based on selected literary and popular materials. (Prerequisite: 100) Y(3-0)

##### RUSS 301A (formerly part of 301) (1½) ASPECTS OF RUSSIAN CULTURE: I (In English)

A survey of Russian culture from the beginnings to 1905. Lectures will focus on major developments in literature, folklore, philosophy, religion, music, art and architecture, as seen against the background of Russia's historical past. (Prerequisite: None, this course is open to all students, except students with credit in 301) F(3-0)

##### RUSS 301B (formerly part of 301) (1½) ASPECTS OF RUSSIAN CULTURE: II (In English)

A survey of Russian culture from 1905 to the present. Lectures will focus on major developments in literature, religion, music and the arts in an attempt to give students a cultural perspective for viewing the contemporary Russian way of life. (Prerequisite: None, this course is open to all students, except students with credit in 301) S(3-0)

##### RUSS 302 (3) THIRD YEAR RUSSIAN

A sequel to 149 or 200, this course is designed to improve the students' mastery of the spoken and written language. Emphasis on informal grammar review, conversation, reading, composition and comprehension. (Prerequisites: 200 and 203, or permission of the Department) Y(3-0)

##### RUSS 303 (3) INTERMEDIATE RUSSIAN PRACTICE

This course, a sequel to 203, is designed to provide students with more advanced oral and written practice in Russian and to enhance reading skills based on major works of literature. The course is conducted in Russian. (Prerequisite: 200 or 149, and 203, or permission of the Department) NO(3-0)

##### RUSS 304 (1½) LITERATURE AND CINEMA IN THE U.S.S.R. (In English)

A survey of selected films that are adaptations of significant literary works or illustrate important cultural events or movements. (Prerequisite: None, this course is open to all students) F(3-0)

##### RUSS 308A (formerly part of 308) (1½) RUSSIAN LITERATURE IN TRANSLATION: I (In English)

A survey of Russian literature from its beginnings to 1917. This is a required course for Russian major students to be taken in their third or fourth year and in the same winter session as 308B. (Offered in alternate years) (Prerequisite: None, this course is open to all students) F(3-0)

##### RUSS 308B (formerly part of 308) (1½) RUSSIAN LITERATURE IN TRANSLATION: II (In English)

A survey of Russian literature from 1917 to the present. This is a required course for Russian major students to be taken in their third or fourth year and in the same winter session as 308A. (Offered in alternate years) (Prerequisite: None, this course is open to all students) S(3-0)

##### \*RUSS 321 (3) RUSSIAN WORKSHOP IN THE SOVIET UNION

Under the supervision of faculty, students will be engaged in specialized projects dealing with Russian language and culture. (May be taken more than once to a maximum of 6 units with permission of the Department) (Prerequisite: 100 or 390 or the permission of the Department) (Note: This course will involve one month's study in the Soviet Union; for details consult the Department.) NO(3-0)

##### RUSS 331 (formerly 250) (1½) THE PEOPLES OF THE SOVIET UNION (In English)

An introductory survey of the cultures of the non-Slavic peoples of the Soviet Union: European Russia, the Caucasus, Soviet Central Asia and Siberia. (Prerequisite: None. This course is open to all students) S(3-0)



**\*RUSS 390 (3) RUSSIAN READING COURSE**

A one year course, intended for students who wish to read Soviet journals in the fields of the Natural and Social Sciences and the Humanities. Material is chosen corresponding to the students' areas of interest. (*Prerequisite*: None, this course is open to all students. Students who have passed 100 cannot receive credit for this course.) (Offered in Summer Studies) NO(3-0)

**RUSS 403 (1½ or 3) READINGS IN RUSSIAN LITERATURE**

This course will examine various authors and/or movements in Russian literature of the 19th and 20th centuries. Students are advised to consult the Department about the topics to be considered in any given year. (May be taken more than once, to a maximum of 6 units, with permission of the Chair of the Department) (*Prerequisite*: 302 and 303, or permission of the Department) NO(3-0)

**RUSS 406 (3) FOURTH YEAR RUSSIAN**

A continuation of 302. An advanced course in the use of Russian, both written and spoken. This course will stress written composition, stylistic analysis, conversational fluency. (*Prerequisite*: 302) Y(3-0)

**RUSS 414 (formerly part of 412 and 413) (1½) TOLSTOY AND DOSTOEVSKY (In English)**

The works of two major Russian writers of the 19th century will be studied against the background of their lives and times. (*Prerequisite*: Second year standing) S(3-0)

**RUSS 426 (1½) PRACTICAL TRANSLATION**

A study of practical translation from and into Russian. Material will be drawn from a representative variety of fields including business, law, social work, politics, literature, Soviet press and sciences. (*Prerequisite*: 302) NO(3-0)

**RUSS 427 (1½) ADVANCED CONVERSATION**

This course, conducted entirely in Russian, is designed to further the students' command of idiomatic Russian and to enhance oral skills. (*Prerequisite*: 302, or permission of the Department) NO(3-0)

**RUSS 434 (1½ or 3) SPECIAL TOPICS**

This course is designed for Major students and may be offered either as a reading course, or a seminar, depending on the students' interest and on the availability of a supervising instructor. (May be taken twice in different topics to a maximum of six units) (*Prerequisite*: 200 or 149, and 203, and permission of the Department) NO(3-0)

**SLAVONICS****SLAV 312 (formerly also POLI 312) (3) COMMUNIST POLITICAL SYSTEMS (In English)**

An analysis of governmental processes in Communist ruled political systems, with emphasis on Eastern Europe, the U.S.S.R., and mainland China; comparative analysis of Communist revolutions, parties and groups, leadership elites, policy making and administration, political culture and socialization; and the development of the Communist international system. (Students are strongly advised to complete an introductory course in Political Science before undertaking this advanced course) NO(3-0)

**SLAV 315 (POLI 315) (1½) GOVERNMENT AND POLITICS IN THE U.S.S.R. (In English)**

An intensive analysis of the governmental process in the Soviet Union: examination of the political development of the U.S.S.R., the political culture and socialization process, interest groups and policy making process, administration and the judicial system. (Students are strongly advised to complete an introductory course in Political Science before undertaking this advanced course) F(3-0)

**SLAV 340 (LING 340) (1½) INTRODUCTION TO THE SLAVIC LANGUAGES (In English)**

This course will acquaint students with the family of Slavic languages, their history and place within the Indo-European language family, and

their present day structure. (*Prerequisite*: A previous course in Linguistics or permission of the Department) NO(3-0)

**SLAV 341 (LING 341) (1½) SEMINAR IN A SLAVIC LANGUAGE: STRUCTURE AND HISTORY (In English)**

Although designed as a continuation of 340 (Linguistics 340), this course can be taken independently as well, and more than once for credit (in different languages), to a maximum of 3 units. This course will deal with the history and structure of a Slavic language not offered otherwise in the Department of Slavonic Studies. Depending upon demand, a different language will be treated in each given year. Languages offered at present are: Serbian, Polish, Ukrainian, Czech. (*Prerequisite*: A previous course in Linguistics or permission of the Department) NO(3-0)

**SLAV 374 (HIST 374) (3) IMPERIAL RUSSIA, 1689-1917 (In English)**

A history of Russia from Peter the Great to the fall of the monarchy. The course traces the response of the Russian state and Russian society to changing national needs and the challenge of the West. Through reports and discussions, emphasis will be given to periods of rapid change. (Students are strongly advised to complete an introductory course in history before undertaking this advanced course) Y(3-0)

**SLAV 376 (HIST 376) (1½) THE SOVIET UNION, 1917-1991**

A history of the Soviet Union from its origins to its dissolution. This course will examine the policies of the Communist leadership and the impact of these policies on the U.S.S.R. and the world. In addition, emphasis will be given to those aspects of Soviet life that developed independently of and contrary to the wishes of the leadership. (3-0)

**SLAV 390 (1½ or 3) DIRECTED STUDIES IN A SLAVIC LANGUAGE**

This course may be offered as a reading or grammar course at any level, from introductory to advanced. The language may be Serbo-Croatian, Russian, or another Slavic language. The course may also be offered as an introduction to teaching methodology in the Russian language. (May be taken more than once in a given language to a maximum of six units) (*Prerequisite*: Permission of the Department) NO

**SLAV 415 (POLI 415) (1½) POLITICAL REFORM IN THE SOVIET UNION**

A seminar on political reform in the Soviet Union as a policy process, with special attention to contemporary political, economic, and social changes. Topics to be examined include: the sources of political change, setting the agenda for reform, formulating a reform policy, mobilizing public support, and the analysis of policy outcomes. (*Prerequisite*: POLI 312 or 315, or permission of the instructor) NO(3-0)

**SLAV 443 (POLI 443) (1½) COMMUNIST INTERNATIONAL RELATIONS (In English)**

An examination of the theory and practice of relations among Communist Party states, analyzing the domestic and external sources of behaviour, the comparative conduct of foreign policy, the integration and disintegration of the "world socialist system". (Students are strongly advised to complete an introductory course in Political Science before undertaking this advanced course) S(3-0)

**SERBO-CROATIAN****\*SERB 300 (3) FIRST YEAR SERBO-CROATIAN**

Introduction to the fundamentals of Serbo-Croatian grammar; basic reading, writing and conversational skills. (*Prerequisite*: A 200 level course in a foreign language or its equivalent, or the permission of the Department) NO(3-0)

**\*SERB 400 (3) SECOND YEAR SERBO-CROATIAN**

Review of essential grammar, progressing into more advanced grammar and composition; conversation with some practice in the language laboratory. (*Prerequisite*: 300, or its equivalent, or the permission of the instructor) NO(3-0)



## DEPARTMENT OF SOCIOLOGY

Pam Duncan, B.A. (Wis. St.), M.A. (Chic.), Ph.D. (Wis.), Associate Professor (Psychology) and Acting Chair of the Department (to 30 June 1995)

William K. Carroll, B.A. (Brock), M.A., Ph.D. (York), Professor

Neena L. Chappell, B.A. (Car.), M.A., Ph.D. (McM.), Professor

R. Alan Hedley, B.A., M.A. (Brit. Col.), Ph.D. (Ore.), Professor

Jean E. Veevers, B.A., M.A. (Alta.), Ph.D. (Tor.), Professor

P. Morgan Baker, B.A. (U. of Vic.), M.A., Ph.D. (Minn.), Associate Professor

Cecilia M. Benoit, B.A., (McM.), Ph.D. (Tor.), Associate Professor

Holly Devor, B.A. (York), M.A. (S. Fraser), Ph.D. (Wash.), Associate Professor

C. David Gartrell, B.A. (Brit. Col.), M.A., Ph.D. (Harv.), Associate Professor

Daniel J. Koenig, A.B. (Notre Dame), M.S. (Florida St.), Ph.D. (Ill.), Associate Professor

Richard L. Ogmundson, B.A. (U. of Vic.), M.A., Ph.D. (Mich.), Associate Professor

Bill McCarthy, B.A. (Guelph), B.Ed. (W. Ont.), M.A., Ph.D. (Tor.), Associate Professor

T. Rennie Warburton, B.A. (Leeds), Ph.D. (Lond.), Associate Professor

Martha McMahon, B.A. (Univ. College, Dublin), M.A., Ph.D. (McM.), Assistant Professor

Margaret J. Penning, B.A. (Winn.), M.A. (Man.), Ph.D. (Alta.), Assistant Professor

Zheng Wu, B.A. (Beijing Second Foreign Lang. Inst.), M.A. (U. of Vic.), Ph.D. (W. Ont.), Assistant Professor

### Visiting, Adjunct and Cross-listed Appointments:

Dorothy E. Smith, B.Sc. (London), Ph.D. (Calif., Berk.), Adjunct Professor (1994-95)

Dieter K. Haselbach, Ph.D. (Philippa-Universitat), Visiting Associate Professor (1994-95)

Paul D. Brady, B.A., M.A. (Sask.), Ph.D. (Uppsala), Visiting Assistant Professor (1994-95)

Lanyan Chen, B.A. (U. of Inner Mong.), M.A. (S. Fraser), Ph.D. (Brit. Col.), Visiting Assistant Professor (1994-95)

William B. McGuigan, B.A. (McG.), M.A. (Calg.), Visiting Lecturer (1994-95)

## GRADUATE PROGRAM

For information on studies leading to the M.A. degree, see page 362.

## UNDERGRADUATE PROGRAMS

The Department offers General, Major and Honours programs. Students interested in any of these programs are urged to consult the departmental undergraduate adviser as early as possible.

Sociology 100 is required for all three programs. This requirement may be satisfied by course challenge or may be omitted by permission of the Department.

All programs require completion of 3 units with a mean grade of B- or better from the following list of courses offered by the Department of English: 115, 116, 121 or 122. (Note: Students who take or have transfer credit for 116 cannot take 121 or 122.) This requirement must be met before or concurrently with enrolment in Sociology courses numbered 300 and above if these courses are to be counted toward the General, Major or Honours programs. Students may be exempted from 1.5 units of the required 3 units if they meet the University conditions for exemption (see item 1, "English Requirements for Undergraduates" p. 15 of the Calendar).

**General:** In addition to 100, the General Program requires 210, 211, and nine additional units of Sociology from courses numbered 300 and above.

**Major:** In addition to 100, the Major Program requires 210, 211, 302, 371, 375A, 375B, 402 and 7½ additional units of Sociology numbered 300 and above. Enrolment in 371 requires completion of MATH 120 (or equivalent) with a grade of B- or better.

**Honours:** In addition to 100, the Honours program requires 210, 211, 302, 371, 375A, 375B, 402, 471, 499, and 9 additional units of Sociology numbered 300 and above. It is recommended that Honours students take 371, 375A, 375B, and 471 as early as possible. Enrolment in 371 requires completion of MATH 120 (or equivalent) with a grade of B- or better.

To receive a First Class Honours degree a student must obtain a grade of at least A- in 499, and a minimum grade point average of 7.00 for all Sociology courses numbered 300 and above, and have a minimum graduating average of 6.50.

To receive a Second Class Honours degree a student must obtain a grade of at least B- in 499, and a grade point average of at least 6.00 in all Sociology courses numbered 300 and above, and have a minimum graduating average of 3.50.

Honours students who do not meet the above requirements, but complete those for a Major in Sociology, may opt to receive a Major degree. A student who opts for this and who has a graduating average of 6.50 would receive a Major in Sociology with First Class standing, while a student with a graduating average between 3.50 and 6.49 would receive a Major degree with Second Class standing.

## UNDERGRADUATE COURSES

Some of these courses are not offered every year. Please consult with the Department to find out which courses will be given in a particular year.

### Prerequisite for Third and Fourth Year courses:

Courses numbered 300 and above may be chosen as electives if one of the following criteria is satisfied.

- (a) Completion of 100 with a grade of A- or better
- (b) Completion of 100 and 1½ additional units of sociology numbered below 300, with a mean grade of B- or better
- (c) Third Year standing with a G.P.A. in the previous academic year of 5.00 or better and the written permission of the instructor.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### SOCI 100 (1½ formerly 3) INTRODUCTION TO SOCIOLOGY

A general introduction to the perspectives and methods of sociology, including a consideration of basic concepts and problems in the analysis of groups and societies. FSK(3-0)

### SOCI 103 (formerly half of 200) (1½) CANADIAN SOCIETY

The origins, development, and structure of Canadian society analyzed in terms of the new Canadian political economy. Examples of questions which may be addressed are: What kind of society exists in Canada? How did it come to acquire its unique features? What role has immigration played in Canada's development? What kinds of social inequality exist in Canada and why? S(3-0)

### SOCI 202 (1½) AN INTRODUCTION TO SOCIAL PROBLEMS

A survey of the incidence, correlates, effects and social response to crime and delinquency, familial disruption, economic deprivation and racial, ethnic and sex discrimination, etc. (Prerequisite: 100, or attainment of a minimum GPA of 4.0 in the immediately preceding term, or written permission of the Department) FK(3-0)

### SOCI 210 (1½) HISTORY OF SOCIOLOGICAL THEORY

Analysis of major theoretical influences on the development of sociology, including the work of Marx, Weber, Durkheim, Simmel, Mead, Parsons and others. (Not open to students who have completed 209 or 300) (Prerequisite: Sociology 100 or permission of instructor) FSK(3-0)

### SOCI 211 (1½) INTRODUCTION TO SOCIOLOGICAL RESEARCH

Introduction to important concepts and strategies of social research, including conceptualization and measurement, research design, sampling, the collection and analysis of qualitative and quantitative data, and an introduction to computer-assisted data analysis. (Not open to students who have completed 209, 375, 375A or 375B) (Prerequisite: 100 or permission of the instructor) FSK(3-0)



**SOCI 301 (3) SOCIAL CONTROL AND DEVIANT BEHAVIOUR**

Types of social control are examined through analyzing conceptualizations and statistics about crime and other forms of deviance. YK(3-0)

**SOCI 302 (formerly part of 300) (1½) SOCIOLOGICAL EXPLANATIONS**

Nature of explanations in sociological theory, combining an evaluation of different conceptions of the nature of science with an examination of important sociological theorists and frameworks. (Not open to students who have completed 300) (*Prerequisite*: 210 or permission of instructor) F(3-0)

**SOCI 303 (1½) CANADIAN SOCIETY AND POLITICAL ECONOMY**

An examination of recent literature on Canadian society from the standpoint of the new Canadian political economy. Topics include the political economy of class, gender and ethnicity in the Canadian setting; the national question as it has been framed around issues of foreign domination, Quebec nationalism and aboriginal rights; and the position of Canada within the changing capitalist world-system. (*Prerequisite*: 103 or permission of instructor) NO(3-0)

**SOCI 304 (1½, formerly 3) THE INDIVIDUAL AND SOCIETY: I**

An introduction to sociological perspectives on social psychology, emphasizing the importance of social structure in accounting for such topics as social cognition, the self, social interaction, and collective behaviour. Students will have the opportunity to experience directly, in a series of research exercises, the diverse research methods used by social psychologists. F(3-0)

**SOCI 305A (formerly part of 305) (1½) SOCIAL PSYCHOLOGY OF MARRIAGE AND FAMILY**

The dynamics of the contemporary family using a life cycle approach including socialization for gender roles, dynamics of mate selection, marital interaction and disruptions, and intergenerational dynamics. FSK(3-0)

**SOCI 305B (formerly part of 305) (1½) THE FAMILY AND SOCIETY**

The contemporary family as a social institution with emphasis on its interface with social class, population, religion, law and social policy. (*Prerequisite*: 305A or permission of the instructor) FSK(3-0)

**SOCI 310 (1½) RELIGION IN SOCIETY**

Selected theories and research on the relationship between religion and other areas of society. Topics may include: sects, cults and other religious organizations; religion and the social position of women; religion and political conflict; the issue of the rising or declining influence of religion in contemporary societies. F(3-0)

**SOCI 311 (1½) IDEOLOGY AND SOCIETY**

A discussion of the concept of ideology in various theoretical perspectives, such as Marxism, feminism, cultural studies, and post-modernism. Specific topics to be explored may include the role of ideology in the mass media, formal education, colonialism and post-colonialism, and everyday life. NO(3-0)

**SOCI 315 (1½, formerly 3) CLASS, STATUS, AND POWER**

An overview of theory and research in the area of social inequality. Focus is on the sources and consequences of the various forms of inequality (e.g., political, social, economic) found in present day societies. F(3-0)

**SOCI 316 (1½) SOCIAL MOVEMENTS**

A study of the sources, stages and consequences of social movements. Various theories about the nature of social movements will be discussed. Data bearing on these theories concerning topics such as the nature of participants, the importance of elite leadership, the role of communication networks, and the activity of agents of social control will also be considered. Specific social movements, such as feminism, environmentalism, gay and lesbian liberation, the peace movement, trade unionism, socialism, and national liberation will be examined in detail. F(3-0)

**SOCI 319 (1½) INDUSTRIAL SOCIOLOGY**

Major topics include industrialization and the relation between the rich and poor nations, industrialization in Canada, labor force trends, individual-work linkages and labour-management relations. S(3-0)

**SOCI 321 (1½) SOCIOLOGY OF OCCUPATIONS**

Attitudes to work, similarities and differences between occupations; the nature of professions; the contrast between jobs and careers. F(3-0)

**SOCI 323 (1½) STRUCTURE OF FORMAL ORGANIZATIONS**

Theories of and methodological problems in the study of organizational structures. Structural dimensions of the division of labour, power, communication, hierarchy, size, technology, and the relationships between organizations will be stressed. F(3-0)

**SOCI 324 (1½) PROCESS AND CHANGE IN FORMAL ORGANIZATIONS**

The first half of the course will cover such topics as norms, values, and roles, including morale, administration, job satisfaction and alienation. The second half will cover organizational change including the evolving types of formal organizations. S(3-0)

**SOCI 325 (1½) SMALL GROUP DYNAMICS**

A survey of sociological approaches to small groups, including topics such as group formation and cohesion, group influence on the individual, group differentiation, decision making and problem solving in groups, and collective behaviour. Small group research methodology will be a major concern, and will be taught by a series of labs in the Small Groups Laboratory as well as in the field. NO(3-0)

**SOCI 326 (1½) SOCIAL NETWORKS**

The major models, methods, and findings of network analysis. The following areas may be discussed: friendship, social influence and status, small groups, communication and diffusion of information, corporate and community organization, social and economic mobility, and computer analysis of network data. (*Prerequisite*: 211 or permission of the instructor) NO(3-0)

**SOCI 331 (formerly half of 330) (1½) POLITICAL SOCIOLOGY**

Study of the social bases (e.g. region, class, religion, ethnicity, language, culture) of political behaviour. F(3-0)

**SOCI 332 (formerly half of 330) (1½) ELITES AND SOCIETY**

Study of institutional elites (e.g., business, labour, state, media, church, educational, military) and their roles in society. F(3-0)

**SOCI 335 (1½) ETHNIC AND RACE RELATIONS**

Using mainly Canadian examples, this course will examine theories and research on ethnicity as identity and on ethnic and race relations as elements of social inequality. SK(3-0)

**SOCI 343 (1½) CANADIAN DEMOGRAPHY**

Study of the growth, distribution and movement of the Canadian population with special emphasis upon the social causes of changes in patterns of fertility, mortality and migration and the social implications of these changes for Canadian society. (Note: Credit cannot be given for both 343 and 340) F(3-0)

**SOCI 350 (1½, formerly 3) SOCIAL WELFARE AS A SOCIAL INSTITUTION**

The historical development of social welfare as a social institution; the organizations of welfare services and the functions they perform in modern society; the relation of social welfare to other institutions. NO(3-0)

**SOCI 355 (1½) THE CORPORATION AND SOCIETY**

The corporation as a basic institution in modern Western societies; its development in Canada and elsewhere; its impact on other institutions, including the family, education, the state and social class. F(3-0)

**SOCI 365 (1½) SOCIOLOGY OF LEISURE**

Conceptual problems in the identification of leisure. The production, consumption and distribution of leisure. The emergence of leisure defined lifestyles. The study of selected leisure activities. NO(3-0)



**SOCI 371 (1½) STATISTICAL ANALYSIS IN SOCIOLOGY: I**

Probability distributions, statistical inference, including estimation and hypothesis testing, and an introduction to bivariate statistical analysis. Computer-assisted analysis of sociological data. (Course restricted to students in a Sociology program and majors in Leisure Studies; if space permits, other students may be permitted to register) (*Prerequisites*: 211 or permission of the instructor, and completion of the Departmental mathematics prerequisite) (See Credit Limit, page 18) FSK(3-1)

**SOCI 375A (formerly half of 375) (1½) SOCIOLOGICAL RESEARCH METHODS I**

Strategies of qualitative research design. Possible topics include: unobtrusive measures, field work, evaluation and action research, historical research, and textual analysis. (*Prerequisites*: 210 and 211, or permission of the instructor) FS(3-0)

**SOCI 375B (formerly half of 375) (1½) SOCIOLOGICAL RESEARCH METHODS II**

Strategies of quantitative research design. Possible topics include: experimental designs, survey research, questionnaire construction and secondary data analysis. (*Prerequisites*: 210, 211, and 371 or permission of the instructor; 371 may be taken concurrently) FS(3-0)

**SOCI 381 (1½) SOCIOLOGY OF GENDER**

An examination of the social import of gender in contemporary society. Includes evaluation of evidence of biological, psychological, and social differences and similarities between males and females; definitions of masculinity, femininity, and androgyny; gender power and socialization; implications of gender for achievements in education, income and occupations; consideration of relevant sociological theory; and analysis of consequences of social changes affecting gender. S(3-0)

**SOCI 382 (1½) HUMAN SEXUALITY**

An examination of theories and practices of human sexual variance. Some varieties of sexuality to be studied will include heterosexuality, homosexuality, sado-masochism, pedophilia, and transsexual sexuality. Theories to be explored will include aetiologies of sexual behaviours and theories of the interplay of sex and gender with sexuality. NO(3-0)

**SOCI 385 (1½) SOCIOLOGY OF AGING**

A survey of sociological approaches to aging, including topics such as: cultural definitions of age; demographic trends and consequences; methodological problems in the study of aging; age stratification; retirement; death and dying. SK(3-0)

**SOCI 390 (1½) SELECTED PROBLEMS IN SOCIOLOGY**

Presentation of current interests of various faculty members. Students interested in this course should inquire at Registration when the course is to be offered and what the substantive presentation will involve. (Students may enroll in this course in different areas for a maximum of 3 units) (3-0)

**SOCI 401 (1½) SOCIOLOGY OF LAW**

The interrelationships of law and other social institutions, socio-economic origins and class interests of legal functionaries, and law as social conflict are analyzed in Canadian and cross cultural contexts. (*Prerequisites* as stated on page 130 and either completion of 301 or fourth year standing.) NO(3-0)

**SOCI 402 (formerly part of 300) (1½) CURRENT ISSUES IN SOCIOLOGICAL THEORY**

Detailed study of particular recent developments or ongoing issues in sociological theory. Topics may vary from year to year to include either particular theoretical orientations — e.g., Marxism, exchange theory, symbolic interactionism — or particular theoretical issues in the discipline — e.g., micro-macro linkages, theory "groups" and boundaries, theoretical model building. (Not open to students who have completed 300) (*Prerequisite*: 302 or permission of the instructor.) FS

**SOCI 403 (1½) SOCIOLOGY OF JUVENILE DELINQUENCY**

A seminar course which concentrates on social theories of juvenile delinquency and related empirical evidence. (*Prerequisites*: 301 and 371) NO(3-0)

**SOCI 404 (1½) THE INDIVIDUAL AND SOCIETY II**

Current issues in sociological social psychology, involving detailed study of theories, methods and findings on such topics as justice and social behaviour, class consciousness, social dilemmas, and emotion. Topics may vary from year to year; students should consult the instructor or departmental handbook about the content of the course. (*Prerequisite*: 304 or permission of the instructor. May not be repeated for credit.) NO(3-0)

**SOCI 418 (1½) SOCIAL CHANGE**

General history of cultural evolution and social change. The impact of complex cultures upon the native peoples of Africa, Asia, the Pacific and the Americas. (*Prerequisite*: 100, and ANTH 100A and/or 100B or 200 or permission of the instructor) NO(3-0)

**SOCI 419 (ANTH 419) (1½) MODERNIZATION AND DEVELOPMENT**

An examination of selected theories and research on development, underdevelopment, and dependency in the modern world; examples will be taken from various parts of the world, including Canada. S(3-0)

**SOCI 443 (1½) (formerly 342, formerly 340) WORLD DEMOGRAPHY**

Study of the growth, distribution and movement of the world's population with special emphasis upon the social causes of changes in patterns of fertility, mortality and migration and the social implications of these changes. (Students are strongly advised to complete 343 prior to taking 443.) SK(3-0)

**SOCI 445 (1½) SOCIOLOGY OF HEALTH AND ILLNESS**

Seminar in the social implications of illness, the health professions, systems of health care, and epidemiology. SK(3-0)

**SOCI 465 (1½) ENVIRONMENTAL SOCIOLOGY**

Exploration of how social relationships structure human interaction with the natural environment. May include the following: race, class and gender in environmental analysis; assumptions and interests located in current conceptualizations of environmental issues and solutions; institutional and non-institutional agency in environmental problems and responses. S(3-0)

**SOCI 471 (formerly 372) (1½) STATISTICAL ANALYSIS IN SOCIOLOGY: II**

An introduction to multivariate relationships, with emphasis on topics in multiple regression and correlation, including nonlinearity, interaction, analysis of variance and other topics of the general linear model. Computer-assisted analysis of sociological data. (*Prerequisite*: 371 or permission of the instructor) (See Credit Limit, page 18) F(3-1)

**SOCI 481 (1½) FEMINIST THEORY**

Introduction to historical and contemporary trends in feminist theory which traces the development of individual theoretical perspectives and explores the ways in which these trends overlap and interact. (*Prerequisite*: 302 or WS 301 or permission of the instructor) F(3-0)

**SOCI 490 (1-3) DIRECTED STUDIES**

This course may be submitted for an elective course in Sociology in the Fourth Year of the Honours Program with the permission of the Department.

**SOCI 499 (3) HONOURS SEMINAR AND GRADUATING ESSAY**

Honours students are permitted to audit this seminar in the Third Year and are required to take the seminar for credit in the Fourth Year.

**DEPARTMENT OF WOMEN'S STUDIES**

Chair of the Department (Appointment pending)  
Jennifer Waelti-Walters, B.A. (Lond.), L. ès L. (Lille), Ph.D. (Lond.), Professor  
Michèle Pujol, D.E.E.S. (Paris I, Pantheon-Sorbonne), Dip. H.E.C.J.F., M.A. (Wash.), Ph.D. (S. Fraser), Associate Professor

Christine St. Peter, B.A. (Tor.), M.A. (York), Ph.D. (Tor.), Associate Professor  
Catherine H. Joyce, B.A. (U. of Vic.), M.A. (Car.), Senior Instructor  
Deborah R. Yaffe, B.A. (Calif., Los Angeles), B.Ed. (Lond.), M.A. (U. of Vic.), Senior Instructor



**Visiting, Adjunct and Cross-listed Appointments:**

Laura J. Beard, B.A., M.A., Ph.D. (Johns H.), Visiting Assistant Professor (1994-95)

Jyoti Sanghera, B.A. (Punjab), M.A. (Jawaharlal Nehru), M.A. (Inst. of Soc. Stud., The Hague), Visiting Lecturer (1994-95)

Women's Studies offers an Honours and a Major Program leading to the bachelor's degree. The interdisciplinary Women's Studies Program is designed to provide students with a broad perspective on the variety of women's history, experience and thought, as well as introducing students to the new feminist scholarship in traditional academic disciplines. Although a number of departments have developed curricula that provide their students with methods of addressing gender or women's issues from a particular disciplinary perspective, the role of Women's Studies is to integrate the knowledge and methodologies from a wide range of viewpoints.

Students may combine the requirements of a Major Program in Women's Studies and a Major in a complementary discipline to obtain a Double Major.

To be accepted into the Honours Program students must have (a) a minimum grade of A- in all Women's Studies courses. Courses taken must include 301, 302, 350, 351; (b) a minimum of 6.5 GPA in all other courses; (c) written permission of their proposed WS 499 supervisor. Students interested in the Honours Program should consult with the Honours Adviser during their third year. All requirements must be met no later than June 30th prior to the fall term in which students would register in WS 499.

A General Program leading to a B.A. is also offered. By completing the requirements for the General Program together with a Major or Honours Program in another department or faculty, students may obtain a Minor (see Minor and Interfaculty Minor, page 43). Students interested in pursuing a program in Women's Studies should consult with the Program Director as soon as possible.

ARTS COOP: Students interested in exploring this option should see page 49 for details regarding program requirements and options.

**GENERAL PROGRAM**

200A, 200B

9 units of upper level credit, as follows:

301, 302 (formerly 300A & 300B)

350 (formerly 390) or 351

Minimum 1½, to 3 units of 380

Minimum 1½, to 3 units chosen from 350, 351, 395, 400A.

**MAJOR PROGRAM**

200A, 200B

15 units of upper level credit, as follows:

301, 302 (formerly 300A & 300B)

350 (formerly 390)

351

Minimum 3, to 6 units of 380

Minimum 1½, to 4½ units chosen from 395, 490, or List A or B below 400A.

**HONOURS PROGRAM**

200A, 200B

18 units of upper level credit, as follows:

301, 302 (formerly 300A & 300B)

350 (formerly 390)

351

6 units of 380

3 units chosen from 395, 490 or Lists A or B below 400A

499.

**LIST A**

These courses incorporate and accept feminist scholarship.

CLAS 335 (1½) Women in Classical Antiquity

ENGL 463 (1½) Studies in Women and Critical Theory

ENGL 470 (1½) Women's Literary Traditions

ENGL 471 (1½) Women and Literature

ENGL 472 (1½) Gender Issues in Literature

ENGL 473 (1½) Women Writers in English from the Medieval to the Augustan Age

ENGL 474 (1½) Women Writers from the Age of Sensibility to the Victorian Era

E S 422 (1½) Women and the Environment

FREN 488F (1½) Women Writers

GEOG 449 (1½) Women in the City

GER 444 (1½) German Women Writers

HIST 358A (1½ or 3) Women in Canada

HIST 437 (PACI 437) (1½) Japanese Women from the 6th to the 20th Century

ITAL 479A (SPAN 479A) (1½) Women in the Hispanic & Italian World

PACI 440 (1½) Women in Postwar Japan

POLI 411 (1½) Women and Public Policy in Comparative Perspective

POLI 413 (1½) Feminist Political Thought

POLI 468 (1½) Politics of Canadian Feminism

PSYC 441 (1½) Women in Psychology

SOCI 381 (1½) Sociology of Gender

SOCI 382 (1½) Human Sexuality

SOCI 481 (1½) Feminist Theory

FHSD 401 (1½) Women in the Human Services

H A 311 (1½) Women and Television

H A 312 (1½) Woman and Film

H A 412 (1½) Gender Issues in Art History and Art Criticism

H A 432 (1½) Images of and by Women in South Asian Art

H A 433 (1½) Images of and by Women in Southeast Asian Art

**LIST B**

These courses may have pertinent content. Students must obtain approval from the Chair if they wish to use any of the following toward their Women's Studies program requirements. Various departments may offer other variable content courses on Women's Studies topics in a given year. Students are advised to consult with the Chair about the eligibility of other courses for the Women's Studies program.

CHIN 306 (1½) The Literature of the People's Republic of China (1949 to the Present)

ENGL 372 (1½) Special Studies in 18th Century Literature

ENGL 385 (1½) Special Studies in 19th Century English Literature

ENGL 388 (1½) Special Studies in 20th Century British Literature

ENGL 392 (1½) Studies in a Major Figure

ENGL 393 (1½) Myth and Literature

ENGL 394 (1½) Thematic Approaches to Literature

ENGL 426 (1½) Comparative Studies in North American Literature

ENGL 449 (1½) Special Studies in Contemporary Literature

ENGL 462 (1½) Studies in Modern Critical Theory

FREN 488G (1½) Studies in a Major Author or Movement

HIST 365A (1½) Social and Cultural History of Modern Europe: 1770-1848

HIST 365B (1½) Social, Cultural, and Political History of Modern Europe: 1848-1914

HIST 389 (1½ or 3) Seminar in European History

HIST 438 (PACI 438) (1½ or 3) Topics in East Asian History

HIST 439 (PACI 439) (1½) Seminar in East Asian History

PHIL 408 (3) Contemporary European Philosophy

POLI 300C (1½) Post-Enlightenment Political Thought

POLI 404 (3) Theories of the Modern State

POLI 433 (1½ or 3) Issues in Politics

SOCI 305A (1½) Social Psychology of Marriage and the Family

SOCI 305B (1½) The Family and Society

SOCI 316 (1½) Social Movements

SOCI 321 (1½) Sociology of Work and Occupations

SOCI 402 (1½) Current Issues in Sociological Theory

SOCI 445 (1½) Sociology of Health and Illness

MUS 323 (1½) Forms and Genres in Music

CYC 360 (1½ or 3) Special Topics in Child and Youth Care



## NOTES:

1. In all required courses, registration priority will be given to students with: a) a declared Major or Honours in Women's Studies; b) a declared Minor or General Program in Women's Studies; c) previous courses in Women's Studies.
2. WS 380 will be offered with a minimum of 4 different topics over a two year period. Major students must take 3 units of 380 and may take a maximum of 6 units. When WS 380 is also offered under another number, e.g. HIST/PACI 437, students may not take the course a second time for credit in another department.
3. Courses in Women's Studies topics are offered from time to time at short notice in various departments. Any student wishing to include such a course as part of the requirements for the Women's Studies Program must obtain prior approval from the Chair of the Department of Women's Studies.
4. If any of the above upper level courses in other disciplines form part of a student's General, Major or Honours program in another department, they cannot also be used to fulfill the Women's Studies requirements.
5. Full descriptions and prerequisites for the courses listed above in Lists A and B are found under the departments offering the courses.
6. The Division of Continuing Studies offers nondegree courses on a variety of themes within Women's Studies. For more information call Continuing Studies, Women's Studies Program Coordinator, 721-8451.

**WS 100 (1½) HISTORY OF WOMEN'S MOVEMENTS**

Variable content course tracing the development of at least two women's movements in different parts of the world. S(3-0)

**WS 200A (1½) INTRODUCTION TO WOMEN'S STUDIES: I**

Cross-cultural introduction to the interdisciplinary field of Women's Studies. Examination of basic concepts and issues pertinent to the conditions and significance of women's lives. Development of analytical skills and collaborative learning. (Prerequisite: Second year standing or permission of the Chair of Women's Studies) FS(3-0)

**WS 200B (1½) INTRODUCTION TO WOMEN'S STUDIES: II**

Further development of concepts and issues of 200A, and of critical, research and organizational tools appropriate to feminist scholarship and practice. (Prerequisite: 200A or permission of the Chair) FS(3-0)

**WS 301 (formerly 300A) (1½) POWER, WORK AND JUSTICE**

Starting from a global framework, an exploration of the diverse experiences of power, work and justice in Canadian women's lives. (Prerequisites: 200A/B, or permission of the Chair) F(3-0)

**WS 302 (formerly 300B) (1½) BODY, LANGUAGE AND SPIRIT**

Interdisciplinary and multicultural approach to questions of oppression, female creativity and sense of self as expressed through the interrelations of body, language and spirit. (Prerequisites: 200A/B, or permission of the Chair) FS(3-0)

**WS 350 (formerly WS 390) (1½) SECOND WAVE FEMINISM IN CONTEXT**

Socio-political history of second wave feminism. Critical examination of significant texts and themes. (Prerequisites: 200A/B, or permission of the Chair) F(3-0)

**WS 351 (1½) INTERNATIONAL ISSUES IN FEMINIST THEORY AND PRACTICE**

Selected topics studied from an international perspective. Topics will be announced annually. (Prerequisites: 200A/B or permission of the Chair) S(3-0)

**WS 380 (1½) TOPICS IN WOMEN'S STUDIES**

An intensive study of selected aspects of Women's Studies. A compulsory core course normally taught by Women's Studies instructors. (Students are advised to consult the Chair for information regarding the subjects to be considered. May be taken for credit more than once in different topics with permission of the Chair of the department. See

program requirements) (Prerequisites: 200A/B and one of 301, 302, 350, 351, or permission of the instructor. Certain topics may have specific prerequisites. Consult the Director for details) FS(3-0)

**"Beauvoir in Context"**

Exploration of the work of Simone de Beauvoir in relation to the first wave feminist movement in France (1890-1914), the second wave in North America (1968-75) and current French feminism at it is perceived in North America and in France.

J. Waelti-Walters F

**"Jewish Feminist Thought"**

Critical examination of the writings in English of Jewish feminists, in the context of contemporary feminist identity politics. Will look at how Jewish women's traditional responsibility for cultural continuity shapes their concerns in the light of genocide and enforced assimilation, and at how Jews' celebrated love for scholarship both encourages and represses Jewish feminism.

D. Yaffe S

**"Women's Health Issues: Reproductive Technologies"**

The study of feminist analyses of reproductive technologies and their effects on women's lives and bodies. Texts will explore theoretical issues and practical questions drawn from both international and Canadian contexts.

C. St. Peter S

**"Sinister Wisdom"**

Will look at lesbian identities, cultures, philosophies, politics, legal and social issues as created in daily life, from a lesbian perspective.

M. Pujol S

**"Strategies of Resistance"**

Will examine women's resistance to oppression and abuse "across cultures, continents and generations." Will focus on the nature of inequities addressed, modes of various analyses, development of strategies, tools and methods employed, reasons for 'success' or 'failure' — and on how these struggles provide insight into the analyses, strategies and effectiveness of contemporary feminist struggles.

C. Joyce S

**WS 395 (1½) SELECTED ISSUES IN WOMEN'S STUDIES**

Non-compulsory variable content course, offered from time to time, usually by visitors to the Women's Studies Program. (May be taken more than once in different topics to a maximum of 3 units) (Prerequisites: 200A and 200B) F(3-0)

**"Mother-Daughter Relationships: Theory and Personal History"**

An historical reaching back to examine how our grandmothers lived their lives and who our mothers were before they became our mothers. Will explore the complex dynamics of the mother-daughter relationship in its historicity. Personal oral history; readings in theory and fiction that analyze or dramatize the ambivalencies of this crucial connection.

D. Marlatt F

**WS 400A (1½) THEORY AND RESEARCH METHODS**

Study and practice of feminist theories and research methods in a variety of fields. (Prerequisites: 301, 302, 350 and 351) FS(3-0)

**WS 490 (1½) DIRECTED STUDIES**

Supervised study in some area of Women's Studies to be determined by the student and the instructor; written assignments will be required. (Open only to Women's Studies Major or Honours students. May be taken to a maximum of 4½ units) (Prerequisites: 200A/B, and two of 301, 302, 350, 351, or 380) Proforma(3-0)

**WS 499 (1½) HONOURS GRADUATING ESSAY**

During the final year of the Honours Program, students will write a graduating essay of approximately 8,000 words under the direction of a member of the Women's Studies Program. Between September and April students are required to meet periodically as a group to discuss research problems. (See regulations for acceptance into Women's Studies Honours Program, above) Y(3-0)



## BACHELOR OF ARTS (GENERAL) AT MALASPINA Partnership Degree Program

### 4-Year Degree Program

Commencing September 1995, and subject to funding, Malaspina University-College will be offering a four-year Bachelor of Arts (General) degree program in partnership with the University of Victoria.

The program involves all departments currently teaching upper division arts, fine arts, social sciences, and science courses. It provides for a number of delivery mechanisms including learning communities, linked courses, and collaborative learning experiences. It invites students in consultation with faculty advisors to develop a coherent program tailored to meet their needs for either direct entry into the labour market or further education.

The B.A. (General) at Malaspina provides for structure, breadth and flexibility. It requires focused study in two fields with electives chosen from a variety of disciplines in Humanities, Social Sciences, Fine Arts, and Sciences. By acquiring the knowledge of two fields and an understanding of the interrelationships among the disciplines, students will be able to shape courses of study that will be intellectually rewarding and attuned to their specific career goals. Students who register in the program and are interested in graduate studies should arrange to write a Graduate Record Exam (GRE) after third year for some graduate school programs. Students are advised to consult graduate school calendars for specific entrance requirements. There may be a fee for the GRE.

*The Provincial Government may pass legislation giving Malaspina College the authority to grant its own degree for this program. In this event, the University of Victoria will withdraw from this partnership arrangement and not grant degrees for this particular program.*

## BACHELOR OF ARTS IN LIBERAL STUDIES AT MALASPINA

The University of Victoria, in cooperation with Malaspina University-College, offers a Bachelor of Arts degree in Liberal Studies at Malaspina. The program, which is a full-time two-year program offered on the campus of Malaspina University-College at Nanaimo, B.C., is open to students who have completed two full years of university study. It consists of a multidisciplinary core program — an integrated format of lectures, seminars, tutorials and other activities equivalent to three courses, in each of the four terms — plus electives in traditional disciplines. The objective of Liberal Studies is to provide a sound general education as an alternative to programs based on one or two disciplines; the program aims to provide a strong foundation in the basic intellectual skills and a broad background in the arts and sciences. For a full description of the program, information on admission, and other details, please see the Malaspina University-College Calendar.

Students are considered for entry into the program at the end of their

second year. Entry will be granted only to those who have completed at least 27 units of university degree credit courses and who have at least a C+ average in their second year. This is a grade point average of at least 3.00 on the University of Victoria scale (2.4 on a 4-point scale). Students must also have completed at least 3 units of university English courses.

Any university transfer course at the 100 or 200 level offered by Malaspina University-College which has been approved for credit at the University of Victoria will be considered a 'University of Victoria course' for the purposes of satisfying regulation (b) under 'Minimum Degree Requirements for Graduation' on page 23 of the University of Victoria Calendar; this stipulation applies only to students enrolled in the Liberal Studies degree program offered by the University of Victoria at Malaspina University-College.

## BACHELOR OF SCIENCE IN BIOLOGY AT MALASPINA Partnership Degree Program

The University of Victoria, in cooperation with Malaspina University-College, offers a Major B.Sc. program in Biology at Malaspina. The program provides an integrated, research-based approach to the biological sciences. Students will be able to explore the philosophy and ethics of science, study the inter-connectedness of the various areas of Biology, and work with individual faculty members in their fields of research. In addition to core courses, which include Chemistry, Mathematics and Physics, students can choose areas of emphasis such as Aquatic Science, Terrestrial Ecology, Molecular/Cellular and Microbial Biology. In fourth year, students conduct an independent research project with a Biology faculty member.

The program is offered at the Main Campus of Malaspina University-College at Nanaimo, B.C. Students are considered for entry into the program at the end of their second year. Entry will be granted only to

those who have completed all of the first and second year core courses with a minimum grade point average of 4.00 (C+) on the most recent 12 units (24 credits at Malaspina University-College) attempted.

Any university transfer course at the 100 or 200 level offered by Malaspina University-College which has been approved for credit at the University of Victoria, will be considered a 'University of Victoria course' for the purpose of satisfying regulation b) under 'Minimum Degree Requirements for Graduation' on page 23 of the University of Victoria Calendar; this stipulation applies only to students enrolled in the Bachelor of Science (Major) degree program in Biology offered by the University of Victoria at Malaspina University-College.

More details are available in the Malaspina University-College calendar.

*The Provincial Government may pass legislation giving Malaspina College the authority to grant its own degree for this program. In this event, the University of Victoria will withdraw from this partnership arrangement and not grant degrees for this particular program.*



# FACULTY OF BUSINESS

*As of July 1, 1995, the School of Business, formerly in the Faculty of Arts and Science, is established as a separate Faculty*

David A. Boag, B.A. (Laur.), M.B.A., Ph.D. (Tor.), Professor and Director of the School

M. Dale Beckman, B.Sc. (Alta.), M.B.A. (W. Ont.), Ph.D. (Mich. State), Professor and Head, International Business Programs

Ali Dastmalchian, B.Sc. (Nat. U. of Iran), M.Sc., Ph.D. (Wales), Professor and Head, Graduate Programs

Peter E. Murphy, B.Sc., Dip.Ed. (Lond. Sc. Econ.), M.A., Ph.D. (Ohio State), Professor and Head, Tourism Management Program

William V. Rapp, B.A. (Amherst), M.A., Ph.D. (Yale), M.A. (Stan.), CAPI Professor of Economic Relations with Japan

Ignace Ng, B.A., M.A., Ph.D. (S. Fraser), Associate Professor

Hao Zhang, B.Econ. (People's U. of China), M.B.A., Ph.D. (Conc.), Associate Professor

Nailin Bu, B.Sc. (Fudan), Ph.D. (Brit. Col.), Assistant Professor

Timothy J. Craig, B.A. (Wabash Coll.), M.A. (Indiana), M.I.M. (American Grad. Sch. of Int. Mgt.), Ph.D. (Wash.), Assistant Professor

A. R. Elangovan, B.Comm. (Madras), M.B.A. (St. Mary's), Ph.D. (Tor.), Assistant Professor

M. Carmen Galang, B.S., M.I.R. (Philippines), Ph.D. (Illinois, Urbana-Champaign), Assistant Professor

Rebecca Anne Grant, B.S. (Union Coll.), M.B.A. (McG.), Ph.D. (W. Ont.), Assistant Professor

William McNally, B.A. (Queen's), M.A. (S. Fraser), Ph.D. (Tor.), Assistant Professor

Thomas Lawrence, B.Comm., Ph.D. (Alta.), Assistant Professor

David M. McCutcheon, B.Eng. (R.M.C.), M.B.A., Ph.D. (W. Ont.), Assistant Professor

Ron K. Mitchell, B.S. (Calg.), Ph.D. (Utah), Assistant Professor

Sanghoon Nam, B.B.A. (Seoul Nat.), M.B.A. (Bowling Green State), Ph.D. (Ore.), Assistant Professor

Mark P. Pritchard, B.S., M.S., Ph.D. (Ore.), Assistant Professor

Nicos A. Scordis, B.Sc. (Flor. St.), M.B.A. (Georgia), Ph.D. (S. Carolina), Assistant Professor

J. Brock Smith, B.Comm. (Brit. Col.), Ph.D. (W. Ont.), Assistant Professor

F. Ian Stuart, B.Sc. (Queen's), M.B.A., Ph.D. (W. Ont.), Assistant Professor

Stephen S. Tax, B.Comm. (Man.), M.B.A., Ph.D. (Arizona St.), Assistant Professor

Angela M. Tripoli, B.A. (Calif., L.A.), M.A., Ph.D. (Calif. State, Irvine), Assistant Professor

Susan J. Winter, B.A. (Calif., Berkeley), M.A. (Claremont Grad. Sch.), Ph.D. (Ariz.), Assistant Professor

Nancy Belue, B.A. (York), Communications Officer

Michael (Mick) Collins, B.A. (Brist.), M.A. (S. Fraser), Cooperative Education Coordinator

Linda Furney, B.A. (UVic.), M.B.A. (W. Ont.), Assistant to the Director

Nicholas J. B. James, B.Sc. (U. of Vic.), M.B.A. (Brit. Col.), Admissions Officer

Evelyn C. Shaw, B.A. (U. of Vic.), Cooperative Education Program Assistant

John Verreault, B.A. (U. of Vic.), Programmer/Consultant

**Visiting, Adjunct and Cross-listed Appointments:**

William J. Buckwold, M.B.A. (W. Ont.), Visiting Associate Professor (1993-95)

Richard A. Wolfe, B.A. (Sir G. Wms.), M.B.A. (Penn.), M.P.Ed., Ph.D. (Mich.), Visiting Associate Professor (1994-95)

Kenneth W. Thornicroft, LL.B. (Brit. Col.), Visiting Assistant Professor (1993-95)

Connie M. Gaglio, B.A. (N.Y. State), Visiting Lecturer (1993-95)

The Faculty of Business offers a full time program leading to the degree of Bachelor of Commerce (B.Com.). A Master of Business Administration (M.B.A.) program is also offered.

The B.Com. program provides students with a broad education in business together with exposure to the liberal arts and the option of concentration in one of the following areas: International Business Management, Entrepreneurship and Small Business Management, Tourism Management, or Hotel and Restaurant Management. The con-

centration in Hotel and Restaurant Management is not offered in 1995/96. The Faculty intends to offer it in 1996/97, subject to funding. The opportunity to pursue a degree in General Business Management without a concentration in any particular area is also available.

The Bachelor of Commerce program normally consists of eight academic terms and three cooperative education work terms. The first cooperative education work term will begin in May of a student's second academic year of study. The Faculty of Business requires a qualifying year and offers second, third, and fourth year undergraduate courses.

## 1. Admission

Entry to the qualifying year of the program first requires admission to the Faculty of Arts and Science and is subject to possible enrolment limits. Entry to the B.Com. program is at the second year level and is limited by quota on the basis of academic merit. Completion of the qualifying year requirements of the program does not guarantee admission to the program. Applicants for entry to the qualifying year from high school or other institutions should apply directly to the Office of Admission Services for admission to the Faculty of Arts and Science. Visa students should contact the Program Assistant, International Business for information on admission to the Faculty of Business.

All students who are completing the qualifying year in the Faculty of Arts and Science, as well as those students transferring from other institutions, must apply for admission to the Bachelor of Commerce program by April 30 for entry to the Faculty of Business the following September. All documentation required from students transferring from other institutions must be received by the Office of Admissions Services by May 31. There is no January admission. Students are advised to check the University of Victoria Calendar for other relevant application dates.

Normally, 200 students are admitted to the B.Com. program every year. The criteria for selection are given below.

- Preference is given to Canadian citizens and permanent residents of Canada. Due to the international nature of the program, additional positions are available for international students on a student's visa who wish to pursue a B.Com. degree. Interested students should contact the Faculty of Business for information on the Bachelor of Commerce International (B.C.I.) program. The qualifying year or its equivalent at other institutions must be completed before admission to the Faculty of Business will be considered. Students from other institutions should ensure the courses they have taken have the appropriate University of Victoria equivalencies.
- No application with a Grade Point Average (G.P.A.) of less than 3.0 (C+ on the 9 point scale), or 2.5 on a 4 point scale, as determined by the Office of Admission Services or Records Services in the last 15 units of course work will be reviewed by the Faculty of Business.
- Applicants with a G.P.A. greater than 3.0 (C+ on the 9 point scale), or 2.5 on a 4 point scale, in their last 15 units of course work are then ranked, normally in descending order, on the basis of the G.P.A. they achieved in all qualifying year courses and in the last 15 units of course work. The G.P.A. required for admission can fluctuate, depending upon the applications received in a given year.

### i) Admission from within the University of Victoria:

Students who have completed a first-year university program of at least 15 units can apply for admission to the Faculty of Business. Students must have completed the courses required for qualifying year. Students already enrolled at the University of Victoria should fill out both an application to re-register and an application to the Faculty of Business. Appropriate forms are available from Records Services.

### ii) Admission from British Columbia Community Colleges:

All applicants from British Columbia Community Colleges must first be admitted to the University of Victoria. Students who have completed the qualifying year courses can apply for admission into the second year of the Faculty of Business. All courses equivalent to the Faculty of Business qualifying year are listed in the British Columbia Transfer Guide.

If the application is accepted, any commerce courses listed in the British Columbia Transfer Guide which have been completed



within the last seven years with a grade of "C" or above and which are required courses within the B.Com. program can be used toward completion of the B.Com. degree at the University of Victoria. Credit will be given in terms of units only and the letter grade will not be included in any G.P.A. calculation within the Faculty of Business. Further information is available from the Office of Admission Services.

iii) Admission from Commerce Programs at Other Universities:

All applicants from other universities must first be admitted to the University of Victoria. Commerce students attending other universities will be considered with all other applicants. All qualifying year courses or their equivalents must be completed. Transfer credit will be assessed only after a formal application for admission has been made. Students must have achieved a grade of "C" or above within the last seven years in any commerce courses accepted for transfer. Credit will be given in terms of units only and the letter grade will not be included in any G.P.A. calculation within the Faculty of Business. Further information is available from the Office of Admission Services.

iv) Enrollment in Faculty of Business Courses from Outside the Program:

Students from other programs at the University of Victoria who are not enrolled in the B.Com. program can register in a maximum of three commerce courses at the 200 level, with the exception of COM 260 (Business Policy), at the discretion of the Faculty of Business and subject to enrolment limits. Priority for space within Faculty of Business courses is always given to students accepted into the B.Com. program. Unless given special permission due to exceptional circumstance by the B.Com. Coordinator, no students from outside the program will be allowed to enrol in 300 and 400 level commerce courses.

Students from outside the program who plan to apply to register in a commerce course must complete an application form available from the Faculty of Business general office. Instructors do not assign space within Faculty of Business courses. Spaces, if available, are offered to applicants during the first week of a given academic term on the basis of the applicant's sessional G.P.A. Upon receipt of confirmation from the student, registration is completed by the department. Acceptance into selected commerce courses is no indication of acceptance into the program and does not bypass the standard requirements for admission.

v) Second Degree Students

Students who are accepted into the Bachelor of Commerce program with a previous degree must still complete all academic and work term requirements for the B.Com. Students with a Bachelor's degree and a strong academic record are encouraged to explore the Master of Business Administration (M.B.A.) program.

vi) Admission Appeals

Individuals whose application for admission is denied may submit their request for reconsideration to the B.Com. Coordinator within ten days of notification of a denial of admission. The B.Com. Coordinator will then review the application on questions of adherence to published policies and procedures, not on subjective issues or relative merits of the application. Applicants should note that no official of the Faculty of Business can guarantee the admission to the B.Com. program in advance of the admissions process. Written responses to enquiries will be the only material considered as evidence of advice given by the Faculty of Business.

## 2. Qualifying Year of Program (Faculty of Arts and Science)

The qualifying year of the B.Com. program consists of 15 units as follows:

ECON 201 (1½) Principles of Microeconomics

ECON 202 (1½) Principles of Macroeconomics

and:

ENGL 115 (1½) College Composition and

ENGL 116 (1½) Introduction to Literature

or:

ENGL 121 (1½) Literature: Prose Fiction and

ENGL 122 (1½) Literature: Poetry and Drama

and:

MATH 102 (1½) Calculus for Students in the Social and Biological Sciences and

\*MATH 151 (1½) Finite Mathematics

and:

\*\*C SC 105 (1½) Computers and Information Processing

and:

Elective courses (4½ units)

Elective courses are not to include any Business courses.

\*Students should note that MATH 151 is prerequisite to STAT 252 (Statistics for Business). Although MATH 102 and MATH 151 are recommended, the Faculty of Business will accept 3 units of the following, or the course deemed the equivalent by the Department of Mathematics and Statistics, to fulfil the Math requirement: MATH 100, MATH 101, MATH 102, MATH 103 or MATH 151.

\*\*Although C SC 105 is strongly recommended, the Faculty of Business will accept 1.5 units of the following, or the course deemed the equivalent by the Department of Computer Science, to fulfil the C SC requirement: C SC 100, C SC 110, C SC 112, or C SC 115.

## 3. The Bachelor of Commerce Program

The Bachelor of Commerce program consists of 60 units; 21 units must be upper level and 15 units are completed in the qualifying year of the program. Specific requirements of the program are as follows:

### a) Core Courses

#### i) Commerce Core (18 units)

COM 202 (1½) Financial Accounting: I

COM 205 (0) Career Skills and Management

COM 210 (1½) Management Accounting: I

COM 220 (1½) Organizational Behaviour

COM 230 (1½) Introduction to Management Information Systems

COM 240 (1½) Management Finance

COM 250 (1½) Fundamentals of Marketing

COM 260 (1½) Business Policy I

COM 300 (1½) Management of Organizations

COM 302 (1½) Commercial Law

COM 340 (1½) Operations Management

COM 350 (1½) Research Methods in Business

COM 400 (1½) Business Policy II

#### ii) Non-Commerce Core (6 units)

STAT 252 (1½) Statistics for Business (recommended) or

STAT 260 (1½) Introduction to Probability and Statistics: I or

ECON 245 (1½) Descriptive Statistics and Probability and

ECON 302 (1½) Intermediate Microeconomic Theory and

ECON 303 (1½) Intermediate Macroeconomic Theory and

ENGL 225 (1½) Technical Communications: Written and Verbal

### b) Area of Concentration

Students may elect one of four areas of concentration: International Business Management, Entrepreneurship and Small Business Management, Tourism Management, or Hotel and Restaurant Management. The concentration in Hotel and Restaurant Management is not offered in 1995/96. The Faculty intends to offer it in 1996/97, subject to funding. In each area, certain courses are compulsory, while others may be selected from a list of electives. The courses designated for each area of concentration are listed below.

#### i) International Business Management (9-12 units)

Required: (7½ units)

COM 310 (1½) Human Resource Management

IB 301 (1½) The International Environment of Business

IB 302 (1½) Cross National Management

IB 401 (1½) International Marketing

IB 403 (1½) International Finance

Elective: (1½-4½ units)

IB 406 (1½) International Distribution

IB 408 (1½) International Legal Relations

IB 409 (1½) Selected Topics in International Business Management



IB 410 (1½) International Management and Environment

IB 411 (1½) The Japanese Business Environment

Students within the International Business Management area of concentration are required to complete at least 3 units of a foreign language at any level and are strongly recommended to complete 6 units. Students interested in International Business Management are advised to begin taking language courses in the qualifying year of the program and are strongly encouraged to apply for a position in the International Exchange Program (INTEP). Students learning the Japanese language are normally required to register for Business Japanese (JAPA 101), which is designed for Faculty of Business students. For further information, refer to the calendar entry under Pacific and Asian Studies.

ii) Entrepreneurship and Small Business Management (9-12 units)  
Required: (6 units)

COM 310 (1½) Human Resource Management

COM 330 (1½) Financial Control of the Enterprise

ENT 302 (1½) Introduction to Entrepreneurship

ENT 403 (1½) Financing Entrepreneurial Ventures and the Business Plan

Elective: (3-6 units)

ENT 404 (1½) Product Planning and Development

ENT 405 (1½) Managing Organizational Change and Innovation

ENT 406 (1½) Management of Growing Businesses

ENT 409 (1½) Selected Topics of Entrepreneurship and Small Business Management

Students within the Entrepreneurship and Small Business Management area of concentration who are interested in participating in an overseas academic exchange are required to complete at least 3 units of a foreign language at any level and 1½ units of International Business. Please refer to the International Exchange Program (INTEP) requirements for further information.

iii) Tourism Management (9-12 units)

Required: (6 units)

TRM 301 (1½) Introduction to Tourism and Travel

TRM 310 (1½) Human Resource Management

TRM 330 (1½) Financial Control of the Enterprise

TRM 402 (1½) Trends and Innovations in Tourism Management

Elective: (3-6 units)

TRM 304 (1½) Tourism Marketing

TRM 307 (1½) Organization and Management in Tourism

TRM 403 (1½) International Tourism

TRM 405 (1½) Hospitality Sector Management

TRM 406 (1½) Attractions and Transportation Management

TRM 409 (1½) Selected Topics in Tourism Management

Students within the Tourism Management area of concentration who are interested in participating in an overseas academic exchange are required to complete at least 3 units of a foreign language at any level and 1½ units of International Business. Please refer to the International Exchange Program (INTEP) for further information. All students selecting the tourism management area of concentration are expected to complete two industry case workshops (ICW) during their time in the program.

iv) Hotel and Restaurant Management (9-12 units)

**(Not offered in 1995/96 — intend to offer in 1996/97, subject to funding)**

Required: (6 units)

TRM 301 (1½) Introduction to Tourism and Travel

TRM 304 (1½) Tourism Marketing

HOS 315 (1½) Human Aspects of Management in the Hospitality Industry

HOS 335 (1½) Financial Management in the Hospitality Industry

Elective: (3-6 units)

Selected elective courses will be offered in subsequent academic terms. Students should contact the Tourism Management program within the Faculty of Business for indications of electives planned.

Students within the Hotel and Restaurant Management area of concentration who are interested in participating in an overseas academic exchange are required to complete at least 3 units of a foreign language and 1.5 units of International Business. Please refer to the International Exchange Program (INTEP) for further information.

v) General Business Management

Students may elect to complete a program in General Business Management. Within General Business Management, some courses are compulsory while others may be selected from a list of electives. The courses required for General Business Management are listed below:

General Business Management (15 units)

Required: (7½ units)

COM 310 (1½) Human Resource Management

COM 330 (1½) Financial Control of the Enterprise

and 2 of:

ENT 302 (1½) Introduction to Entrepreneurship

TRM 301 (1½) Introduction to the Tourism and Travel Industry

IB 301 (1½) The International Environment of Business

and 1 of:

ENT 404 (1½) Product Planning and Development

TRM 304 (1½) Tourism Marketing

IB 401 (1½) International Marketing

and:

Elective: (7½ units)

Any combination of courses from any of the areas of concentration and/or including courses chosen from the Open Commerce category.

Students within the General Business area of concentration who are interested in participating in an overseas academic exchange are required to complete at least 3 units of a foreign language at any level and 1½ units of International Business. Please refer to the International exchange Program (INTEP) for further information.

c) International Exchange Program (INTEP)

The International Exchange Program (INTEP) provides the opportunity for eligible commerce students, regardless of their area of concentration, to spend approximately four months studying at an overseas institution and receive full course credits for one term. Participation in INTEP is equivalent to 7.5 units; COM 480 (3), COM 460 (1½), and IB 410 (1½) while overseas and COM 470 (1½) upon return. Under certain conditions and if significant experience is gained abroad, students participating in an international exchange may be considered eligible for exemption from one co-op work term.

To be eligible for international academic placements, the following are required:

- a minimum of 3 units of a foreign language
- a minimum of 1½ units of International Business taken within the Faculty of Business at the University of Victoria
- a minimum of 15 units taken at the University of Victoria following admission to the Faculty of Business
- a minimum G.P.A. of 3.0 in all academic terms following admission to the Faculty of Business
- evidence the student has undertaken responsibility to assist with the acculturation of foreign business students during at least one initial orientation week and academic term
- permission of the Head, International Programs

d) Open Commerce (3-6 units)

Students within one of the four areas of concentration are required to select from the electives listed below and/or from any of the areas of concentration, not to exceed 12 units in the chosen area of concentration. Students within General Business Management also have the option of selecting electives from this list.

COM 390 (1½) Canadian Business Environment

COM 405 (1½) Gender Issues in Organizations

COM 420 (1½) Industrial Relations

COM 430 (1½) Marketing Strategy

COM 440 (1½) Business and Government Relations



- COM 445 (1½) Corporate Finance
- COM 450 (1½) Selected Topics in Management
- COM 455 (1½) Conflict and Negotiations in Organizations
- COM 460 (1½) Managing in Diverse Environments
- COM 470 (1½) Directed Studies in Business Research and Presentation
- COM 480 (1½) International Study
- COM 495 (1½) Marketing Communications

e) Other Non-Business (6 units)

All students, including those who have chosen to complete General Business Management, are required to select from the electives listed below.

PHIL 330 (1½) Business Ethics

and/or

courses from the Humanities or Social Sciences with the permission of the Faculty of Business. Some of the suggested courses include:

- ECON 246 (1½) Statistical Inference
- HIST 347 (3) Business and Society in Perspective: The Canadian Experience, 1800-1970
- GEOG 345 (1½) Geography and Planning of Tourism
- GEOG 441 (1½) Geography of Tourism Marketing
- JAPA 201 (1½) Aspects of Japanese Culture
- PACI 200 (3) Cultural Contact and Social Change in the Pacific Region
- PACI 415 (1½) Seminar on Canada and Pacific Asia
- GER 304 (3) A Survey of German Culture
- RUSS 301A (1½) Aspects of Russian Culture: I
- RUSS 301B (1½) Aspects of Russian Culture: II
- STAT 261 (1½) Introduction to Probability and Statistics II
- SPAN 306 (1½) Spanish Culture and Civilization
- SPAN 307 (1½) Latin American Culture and Civilization

and/or

3 or 6 units of language at any level, as recommended for Entrepreneurship and Small Business Management, Tourism Management, and as required for International Business Management or INTEP.

4. Student Responsibility

Students are responsible for ensuring that their courses have been chosen in conformity with the requirements of the B.Com. program. The Faculty of Business and Business Cooperative Education (Coop) will consider the sessional address given to the Office of Records Services as the proper contact address. Students are advised to review the University of Victoria academic regulations outlined on pages XXX of the Calendar.

5. Course Registration

Students are admitted to the B.Com. program, not to particular areas of concentration. Space may be limited in specific areas of concentration outside the commerce core. Students will be required to declare their area of concentration by the end of the third academic term within the Faculty of Business.

Students are expected to have met all prerequisite requirements for commerce courses. A passing grade is acceptable for prerequisite purposes, unless a higher grade is called for in the course description. Normally, students must complete a minimum of 6 units toward their degree per academic term, including at least 3 units of commerce. In particular courses, students may be required to register in designated sections as assigned by the Faculty of Business.

Students who withdraw or receive a failing grade in a course listed within the commerce core or a course required for their chosen area of concentration, must repeat that course during the next academic term in which it is offered. The student may not subsequently withdraw from the course. Students who receive a failing grade in an elective course may either repeat that course or substitute another course in its place.

Students who are in the Faculty of Business and are planning to take a course at another institution for credit toward the University of Victoria Bachelor of Commerce are advised to contact the Faculty of Business Advising Office for a letter of permission prior to enrolling in the course. If permission is granted by the Faculty of Business, a minimum grade of "C" in the course is required for transfer credit. Credit will be given

in terms of units only and the letter grade will not be included in any G.P.A. calculations within the Faculty of Business.

6. Review of Academic Performance within the Faculty of Business

Students who have failed a work term required in the mandatory Business Coop program, or have a G.P.A. in any academic term below 3.0, will be ranked as unsatisfactory and may be required to withdraw for at least one calendar year. The Faculty of Business is under no obligation to readmit students who have been required to withdraw, regardless of the cut-off G.P.A. in the year in which they reapply.

7. Examinations

No supplemental final exams are given by the Faculty of Business. Commerce courses with more than one section may have a common midterm exam scheduled by the Faculty of Business. Students will be advised of the times and dates of the exams by the Faculty of Business and may be expected to attend midterm exams outside of the regular class schedule.

8. Course Challenges

The Faculty of Business does not accept course challenges.

9. Withdrawal from the B.Com. Program

A student who does not register for any courses offered by the Faculty of Business during the first academic term after admission, or during any subsequent academic terms while not on a co-op work term, will be considered to have withdrawn. Any student who is considered withdrawn must re-apply for admission and will be considered in competition with all other applicants. A student who has been admitted to the Faculty of Business and subsequently registers for courses applicable only to another department during an academic term must have the written permission of the Faculty of Business.

Students who voluntarily withdraw from the B.Com. program and later reapply for admission must do so by the standard deadlines and will be considered in competition with all other applicants. The Faculty of Business is under no obligation to re-admit any student who has withdrawn.

10. Leave of Absence

Students must apply in writing to the B.Com. Coordinator for a leave of absence. Unless given written permission by the Faculty of Business to take a leave of absence, students who do not re-register will be considered to have withdrawn. Students on leave of absence are considered outside the program and will not be granted work term credit for experience gained during the leave.

11. Joint Programs with the Faculty of Engineering

**Mechanical and Electrical Engineering (Management Option)**

This program is offered by the Mechanical and Electrical Engineering Department in the Faculty of Engineering. Program details are found in paragraph 2.10 in the Engineering section of the Calendar.

**Major in Computer Science (Business Option)**

This program is offered by the Department of Computer Science in cooperation with the Faculty of Business. Program details are found in paragraph 4.3 in the main Computer Science section of the Calendar.

12. Business Coop Program

Cooperative education is mandatory in the Bachelor of Commerce program and forms an integral part of the academic requirements of the B.Com. degree. The following regulations apply to the program:

a) Normally, students must receive credit for three work terms. However, the following exceptions may apply:

- i) A student with more than twelve or more consecutive months related work experience may apply for work term credit by challenge for one of the three required work terms;
- ii) A student with a recognized coop work term from another accredited post secondary institution may apply for credit for one of the three required work terms.

iii) Students may also apply to obtain a fourth work term.

The total number of work term credits which can be obtained by sections i) and ii) above will not normally be greater than two. Students must apply in writing for work term credit within the first sixty days of their initial academic term within the Bachelor of Commerce program. Under certain conditions, exemption without work term credit may be granted by the Director, Faculty of Business.



- b) Students with a G.P.A. below 3.0 in an academic term will not be eligible to participate in the next scheduled coop work term.
- c) **Academic and Work Term Sequencing**  
The first coop work term takes place after completion of two academic terms in the Faculty of Business. Students then alternate academic terms and work terms, as designed for their area of specialization, until graduation. The Faculty of Business may make amendments to a student's academic and work term sequencing during the course of the program.  
Normally, each area of specialization has one eight month work term built into its structure near the end of the student's program. Students are expected to remain in the prescribed academic and work term sequencing. Priority will be given to placing students who are scheduled to go on a work term as defined by their area of concentration. Students not scheduled to go on a work term will not be eligible to participate in the placement process.
- d) The work term performance of each student will be assessed according to the following criteria:  
i) the employer's evaluation of the student;  
ii) submission of a work term report by the specified deadline;  
iii) evaluation made by the coordinator based on discussion with the student and employer.
- e) A grade of COM, F, or N will be assigned to students at the completion of each work term. Students who fail a work term, or who have not completed a work term by the end of four academic terms may be required to withdraw.
- f) Students are expected to participate fully in the placement process. While every attempt will be made to ensure that all eligible students are placed, the Faculty of Business is under no obligation to guarantee placement. Students who decline a valid coop job offer are ineligible to participate in the placement process for the remainder of that term. Students should be prepared to spend at least one work term outside of the greater Victoria area.
- g) General regulations found in the Cooperative Education Program section of the calendar also apply to the Faculty of Business Coop program. Where the Faculty of Business regulations differ from those of the Cooperative Education Program, Faculty of Business regulations will apply.

#### Degree Requirements

The minimum requirements for graduation are:

- a) Students have successfully met the regulations on academic performance outlined above.
- b) Students have achieved a minimum grade of "C" in each of the courses required within an area of concentration or General Business Management.
- c) Students have satisfactorily completed three coop work terms within the regulations of the Faculty of Business and including any exemptions granted.

### COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

Students should consult with the School concerning courses offered in a particular year.

#### COM 202 (formerly 253) (1½) FINANCIAL ACCOUNTING: I

Introduction to the construction and interpretation of financial statements prepared primarily for use by parties external to the issuing firm or other business entity. Emphasis on accounting policies and their underlying rationale as well as on accounting techniques. (Prerequisite: Second year standing) F(3-0)

#### COM 205 (0) CAREER SKILLS AND MANAGEMENT

Career planning, public speaking, time management, business etiquette, negotiation and personal selling. Laboratory exercises and tutorials will give students the opportunity to hone their skills and practice the use of key tools and concepts. S(1-2)

#### COM 210 (formerly 254) (1½) MANAGEMENT ACCOUNTING: I

Introduction to the development and use of accounting information for management planning and control, and the development of cost information for financial reports. (Prerequisite: 202 or 253) S(3-0)

#### COM 220 (formerly 120) (1½) ORGANIZATIONAL BEHAVIOUR

Introduction to behavioural concepts and tools that will assist the manager in both understanding behaviour in organizations and improving organizational effectiveness. Topics include individual motivation, perception and communication, managerial roles, schools of management theories, group processes and team work, leadership, supervision, and introduction to organizational structure, processes, and culture. (Not normally open to students with credit in PSYC 334A or SOCI 323 or SOCI 324). F(3-0)

#### COM 230 (1½) INTRODUCTION TO MANAGEMENT INFORMATION SYSTEMS

The use of computers and related devices in achieving the data processing and information objectives of the organization. Hardware, software, and the development of business data processing applications. Instruction in the use of application packages and generators. (Prerequisites: 1½ units of 100 level Computer Science; second year standing) S(3-0)

#### COM 240 (1½) MANAGEMENT FINANCE

The institutional environment of Management Finance: the legal setting; the tax environment; the structure of money and capital markets. Disbursement of funds: capital expenditures; working capital management; dividend policy and valuations; mergers and acquisitions. Procurement of funds: long-term sources; short and intermediate term sources; the cost of capital; capital structures. Financial analysis and control: forecasting; flow of funds; analysis of financial statements. (Prerequisite: 202 or 253) S(3-0)

#### COM 250 (1½) FUNDAMENTALS OF MARKETING

Product design and management, distribution channels, and marketing communications are examined as key elements of the marketing mix. Consumer buyer behaviour, sales force management, and marketing research are other topics to be reviewed. F(3-0)

#### COM 260 (1½) BUSINESS POLICY I

Introduction to management and business problems from a general management perspective and stressing the integrative nature of business. Topics include the concept of organizational strategy and how it is formulated, developed and implemented in actual situations; the concept of ethical business policies; the impact of stakeholders, for example government, on business. F(3-0)

#### COM 270 (1½) FINANCIAL AND MANAGEMENT ACCOUNTING FOR SPECIALISTS

Introduction to the construction and interpretation of financial statements and the development and use of accounting information for management planning and control, including the development of cost information. (Enrollment limited to students in the business options of Engineering or Computer Science only. Not open to students with credit in 253, 254, 202 or 210.) S(3-0)

#### COM 300 (1½) MANAGEMENT OF ORGANIZATIONS

The theory, research, and managerial choices relevant to designing, managing and maintaining effective organizations. Influence of factors such as external environments, goals and strategy, organizational culture, and technology on the structure and behaviour of organizations will be examined. Methods of organizational change and development will also be introduced and discussed. (Prerequisite: 220) (3-0)

#### COM 302 (1½) COMMERCIAL LAW

The contract of employment act, common law, and the general principles of law relating to contract. Special consideration will be given to problems arising out of the day-to-day operation of a commercial undertaking. (3-0)



**COM 310 (TRM 310) (1½) HUMAN RESOURCE MANAGEMENT**

Aspects of human resource management in Canada, including human resource planning, job analysis, staffing, employment laws, performance appraisal systems, and compensation policies. In addition, a number of arbitration cases relating to specific personnel issues will be discussed. (*Prerequisites:* 220 and 260) (3-0)

**COM 330 (TRM 330) (1½) FINANCIAL CONTROL OF THE ENTERPRISE**

A series of comprehensive management case studies which integrate financial accounting, managerial accounting, and finance with an in-depth look at issues introduced in earlier courses in order to provide the student with a solid understanding of financial issues facing the business manager. Students within a particular area of concentration will take the appropriate laboratory section. Laboratory exercises will include cases, speakers, and field trips. (*Prerequisite:* 210 and 240) (2-2)

**COM 340 (1½) OPERATIONS MANAGEMENT**

Introduction to the broad scope and major strategic, tactical and operational decisions of operations management, as well as important interactions with other functional areas. Topics covered include types of production processes, process flow analysis, forecasting, resource requirements planning, location and layout of facilities, project planning/management, job design, hierarchical production planning, and introduction to inventory control, production scheduling, and quality assurance. (*Prerequisites:* ECON 245 or STAT 255 or 260) (3-0)

**COM 350 (formerly ENT 301) (1½) RESEARCH METHODS IN BUSINESS**

Theory and practice in business research. Particular attention will be given to the generation of relevant research questions, methods and issues in research design and implementation, statistical analysis, and results interpretation and presentation for business use. Hands-on experience in generating, interpreting, and presenting univariate and multivariate statistics will be provided by assignments and a student research project. (*Prerequisites:* 250 and one or ECON 245, or STAT 255, or STAT 260) (3-0)

**COM 390 (1½) CANADIAN BUSINESS ENVIRONMENT**

An examination of the cultural, economic, geographical, historical, legal, and political factors influencing the environment of doing business in Canada. (Open only to Visiting Exchange or with Permission of the Head of International Programs) (3-0)

**COM 400 (1½) BUSINESS POLICY II**

A series of integrative management case studies to illustrate the application and integration of management functions. The focus will be on organizational strategy and strategic management including the process of choosing and defining goals, formulating and implementing strategies, and monitoring strategic performance. Business ethics and business and government relations will be discussed. (*Prerequisite:* All second and third year commerce core) (3-0)

**COM 405 (1½) GENDER ISSUES IN ORGANIZATIONS**

A seminar examining the ways in which gender influences women's and men's experiences in business organizations. Particular attention will be paid to such topics as: gender differences in managerial styles, work and family, managing dual careers, workplace diversity, gender issues in career management, discrimination and reverse discrimination, organizational power, and work and sexuality. (3-0)

**COM 420 (1½) INDUSTRIAL RELATIONS**

An overview of the employment relationship and the labour relations process in unionized settings. The development of Canadian Labour Movement, functions of trade unions, labour legislation, interests and rights disputes, and dispute resolutions are examined. (*Prerequisites:* 220 and 310) (3-0)

**COM 430 (1½) MARKETING STRATEGY**

Analysis of marketing problems and opportunities and the determination and implementation of marketing plans. Core concepts will be reinforced by such methods as case studies, field projects, and/or a computer simulation where students manage the marketing function of a business in a competitive environment. (*Prerequisite:* 250) (3-0)

**COM 440 (formerly 410) (1½) BUSINESS AND GOVERNMENT RELATIONS**

Management of the interface between business and government is examined through an analysis of decision making processes of government and business. The impact of government measures on business will be discussed and various resolutions and current developments will be stressed. (3-0)

**COM 445 (1½) CORPORATE FINANCE**

Focuses on short- and long-term financing decisions of the firm. Topics include working capital management, cash budgeting, capital structure, capital budgeting and asset valuation. Advanced topics include dividend policy, leasing, mergers and acquisitions and related topics. (*Prerequisite:* 240) (3-0)

**COM 450 (1½) SELECTED TOPICS IN MANAGEMENT**

The course content will reflect the interests of the faculty members and current issues in business and industry and topics may include non-traditional forms of work organizations, leadership, organizational development, and development of managerial skills. (May be taken more than once to a maximum of 6 units with the permission of the Faculty of Business) (*Prerequisite:* All second and third year commerce core or permission of the department) (3-0)

**COM 455 (1½) CONFLICT AND NEGOTIATIONS IN ORGANIZATIONS**

The dynamics of interpersonal and intergroup negotiations in business. Exercises, videos, lectures, and discussions will be used to address a broad spectrum of "conflict situations" with an emphasis on negotiation as a conflict management approach. Focus on major concepts and theories of psychology of negotiation as well as developing negotiating skills. Issues of power, personality, strategy, ethics and culture with regard to negotiation will also be addressed. (*Prerequisites:* 220 and 300) (3-0)

**COM 460 (1½) MANAGING IN DIVERSE ENVIRONMENTS**

Conducted overseas as part of INTEP. An examination in an overseas setting of the development and trends in various business practices. (*Prerequisite:* Participation in International Exchange Program) (3-0)

**COM 470 (1½) DIRECTED STUDIES IN BUSINESS RESEARCH AND PRESENTATION**

Seminar course for students participating in INTEP. Survey and analysis of a particular management theme related to student's international experience. Research will be completed overseas, and upon return, the data will be analyzed and a written report prepared and orally presented to a target audience of either the University community or the community at large. (*Prerequisite:* Participation in International Exchange Program) (3-0)

**COM 480 (1½) INTERNATIONAL STUDY**

Conducted overseas as part of INTEP. An overseas immersion in cultural orientation, cultural sensitivity, on-site company visits with intensive foreign language training. (May be taken more than once to a maximum of 3.0 units with the permission of the Head of International Programs) (*Prerequisite:* Participation in International Exchange Program) (3-0)

**COM 495 (1½) MARKETING COMMUNICATIONS**

Analysis of approaches to advertising, personal selling and sales management. Based on relevant concepts of communication theory, and current business practice. The course will alternate periodically in its emphasis on advertising, and personal selling and sales management. (*Prerequisite:* 250) (3-0)

**ENT 302 (formerly 307) (1½) INTRODUCTION TO ENTREPRENEURSHIP**

The impact of entrepreneurship and the function of the entrepreneur in new venture creation. A framework is developed which incorporates marketing feasibility studies and financial analysis into a comprehensive business plan. The business venture is examined with respect to financial planning, marketing, management, and tax decisions at the various stages of the business life cycle. (*Prerequisites:* COM 220 and COM 250) (3-0)



**ENT 403 (1½) FINANCING ENTREPRENEURIAL VENTURES AND THE BUSINESS PLAN**

The preparation of a business plan which fosters opportunity recognition skills and the ways entrepreneurs identify and commit the necessary resources to finance their ventures. Sources of risk and venture capital and other financing available to entrepreneurs are discussed as well as how appropriate financing is obtained. (*Prerequisite:* 302) (3-0)

**ENT 404 (1½) PRODUCT PLANNING AND DEVELOPMENT**

The development and introduction of new products and the management of existing products. Topics include product positioning, idea generation, screening, concept testing, pre-test market models, test market models, diffusion of innovations, product life cycle, and marketing-mix decisions for existing products. (*Prerequisite:* 302). (3-0)

**ENT 405 (1½) MANAGING ORGANIZATIONAL CHANGE AND INNOVATION**

The nature of change in organizations. Readings, discussions, lectures, case analyses, and simulations of change efforts will be used as a means of building a set of conceptual and pragmatic skills useful in understanding and managing organizational change and innovation. Students are required to complete a major project examining organizational change and/or innovation. (*Prerequisite:* 302 and COM 300) (3-0)

**ENT 406 (formerly 401) (1½) MANAGEMENT OF GROWING BUSINESSES**

The decisions owners-managers make in choosing opportunities, allocating resources, motivating employees, and maintaining control while not stifling the innovative actions that cause a business to grow. Special topics include managing under adversity, management of family businesses, and professionalizing the growing business. Issues such as delegation and accountability, outside boards of directors, budgets and planning, and managing to keep innovation alive at all levels of company will also be discussed. (*Prerequisite:* 302) (3-0)

**ENT 409 (formerly 411) (1½) SELECTED TOPICS IN ENTREPRENEURSHIP MANAGEMENT**

An in depth discussion and research of emerging topics within the field of entrepreneurship. (May be taken more than once to a maximum of 3 units with the permission of the Faculty of Business) (*Prerequisite:* 302) (3-0)

**TRM 301 (1½) INTRODUCTION TO TOURISM AND THE TRAVEL INDUSTRY**

A survey of the modern tourism industry with an emphasis on the inter-linkages and partnerships involved. Introduction to the sustainable development philosophy that is a unifying theme throughout the program. (*Prerequisites:* COM 220 and COM 250) (3-0)

**TRM 304 (formerly 407) (1½) TOURISM MARKETING**

The principles of marketing as applied to the various sectors of the tourism industry, with emphasis on the service industry and public perspectives. The case method will be used to illustrate the relevance of certain marketing principles and techniques. (*Prerequisites:* 301 and COM 250) (3-0)

**TRM 307 (1½) ORGANIZATION AND MANAGEMENT IN TOURISM**

An examination of the inter-organizational structure of tourism and the relationships involved in developing an effective service industry. Communication and group decision making, intra and inter-sectoral organizational culture, organizational change, and policy implications will be discussed. (*Prerequisites:* 301 and COM 220) (3-0)

**TRM 310 (COM 310) (1½) HUMAN RESOURCE MANAGEMENT**

Aspects of human resource management in Canada, including human resource planning, job analysis, staffing, employment laws, performance appraisal systems, and compensation policies. In addition, a number of arbitration cases relating to specific personnel issues will be discussed. (*Prerequisites:* COM 220 and COM 260) (3-0)

**TRM 330 (COM 330) (1½) FINANCIAL CONTROL OF THE ENTERPRISE**

A series of comprehensive management case studies which integrate financial accounting, managerial accounting, and finance with an in-depth look at issues introduced in earlier courses in order to provide the student with a solid understanding of financial issues facing the business manager. Students within a particular area of concentration will take the appropriate laboratory section. Laboratory exercises will include cases, speakers, and field trips. (*Prerequisite:* 210 and 240). (2-2)

**TRM 402 (1½) TRENDS AND INNOVATIONS IN TOURISM MANAGEMENT**

A survey of the internal and external environment in the tourism industry and the implications for the industry of both internal innovations and government policy, in association with the general impact of social and economic trends. (*Prerequisite:* 301) (3-0)

**TRM 403 (1½) INTERNATIONAL TOURISM**

The economic, political and socio-cultural environments of international tourism, with a focus on the need to understand and coordinate these environments in order to facilitate international flows of tourists, tourism development and management skills. (*Prerequisite:* 301) (3-0)

**TRM 405 (1½) HOSPITALITY SECTOR MANAGEMENT**

A survey of the major tourism sector, its internal components and external links with the industry. Emphasis will be placed on management issues and practices that facilitate greater productivity within the sector and within the industry. (*Prerequisite:* TRM 301). (3-0)

**TRM 406 (1½) ATTRACTIONS AND TRANSPORTATION MANAGEMENT**

A survey of the attractions and transportation sectors, and their components and linkages with the industry. Emphasis will be placed on management issues and practices that encourage greater coordination and synergy between various interests. (*Prerequisite:* 301) (3-0)

**TRM 409 (1½) SELECTED TOPICS IN TOURISM MANAGEMENT**

Special topics will be added to the tourism management program on a regular basis in reference to changing issues and faculty availability. (May be taken more than once to a maximum of 3 units with the permission of the Faculty of Business) (*Prerequisite:* 301) (3-0)

**IB 301 (1½) THE INTERNATIONAL ENVIRONMENT OF BUSINESS**

Aspects of the global business environment with emphasis on the reasons for international trade, economic structure of the world market place, and the important trading relations among nations. (*Prerequisite:* Third year standing) (3-0)

**IB 302 (1½) CROSS NATIONAL MANAGEMENT**

An analysis of the influence of national culture on managerial styles and practices, the issues surrounding the universality of managerial practices, and cross-cultural negotiations. (*Prerequisite:* 301) (3-0)

**IB 401 (1½) INTERNATIONAL MARKETING**

Opportunities, characteristics, and trends in foreign markets as well as strategies, organizational planning and control and the problems of adapting marketing concepts and methods in international settings. (*Prerequisites:* 301 and COM 250) (3-0)

**IB 403 (1½) INTERNATIONAL FINANCE**

Financial problems of multinational business; international financial environment; long term capital commitment to an international venture; financial techniques for firm operation. (*Prerequisites:* 301 and COM 240) (3-0)

**IB 406 (1½) INTERNATIONAL DISTRIBUTION**

An examination of the types of international distribution channels available for exporting, as well as considerations in working with, and managing them. (*Prerequisites:* 301 and 401) (3-0)



**IB 408 (1½) INTERNATIONAL LEGAL RELATIONS**

The legal aspects of various international economic organizations including the World Bank, the International Monetary Fund, and the General Agreement on Tariffs and Trade (GATT). Canadian administrative law aspects relating to regulation of trade will be analyzed in the economic and political setting of the world community. (*Prerequisite:* 301) (3-0)

**IB 409 (1½) SELECTED TOPICS IN INTERNATIONAL BUSINESS MANAGEMENT**

An analysis of international business as it relates to specialized fields with specific topics added on a regular basis to reflect changing issues and faculty availability. (May be taken more than once to a maximum of 3 units with the permission of the Faculty of Business) (*Prerequisite:* 301) (3-0)

**IB 410 (1½) INTERNATIONAL MANAGEMENT AND ENVIRONMENT**

Conducted overseas as part of INTEP. Provides students an opportunity to understand how a country's unique cultural, economic, geographical, historical, legal, and political environments affect the way business is done in that country. (*Prerequisite:* Participation in International Exchange Program) (3-0)

**IB 411 (1½) INTRODUCTION TO JAPANESE BUSINESS ENVIRONMENT**

This course provides a broad overview of the Japanese environment. Topics covered include: characteristics of Japanese companies and management, and the link between these and historical, social, and cultural aspects of Japan; challenges facing Canadian and other non-Japanese companies in succeeding in the Japanese market; and current issues. (*Prerequisite:* 301) (3-0)

**HOS 315 (1½) HUMAN ASPECTS OF MANAGEMENT IN THE HOSPITALITY INDUSTRY (Not offered in 1995/96)**

Aspects of human resource management and labour relations within the hotel and restaurant sectors of the industry. These will include managing selection, compensation, turnover, talent development and absenteeism along with union related issues such as certification, grievance handling and negotiations. (*Prerequisite:* COM 210 AND COM 240) (3-0)

**HOS 335 (1½) FINANCIAL MANAGEMENT IN THE HOSPITALITY INDUSTRY (Not offered in 1995/96)**

The course will include internal control/risk management, capital budgeting and cash flow management. (*Prerequisite:* COM 220 and COM 260) (3-0)



# FACULTY OF EDUCATION

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## FACULTY AND OTHER OFFICERS

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 Diana G. Rowles, B.A. (S. Fraser), Visiting Lecturer (1994-95)  
 Nancy Steacy, B.A. (Brit. Col.), M.A. (U. of Vic.), Visiting Lecturer (1994-95)

### DEPARTMENT OF SOCIAL AND NATURAL SCIENCES

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 Werner W. Liedtke, B.Ed., M.Ed., Ph.D. (Alta.), Professor  
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### DIVISION OF PROFESSIONAL STUDIES

H. David Turkington, B.S., M.S. (Wash. St.), Dip. P.E. (Oslo), Ed.D. (Wash. St.), Director  
 Helen E. Bandy, B.A. (Brit. Col.), M.Ed. (U. of Vic.), Coordinator of School Experiences (Elementary)  
 Earl D. Cherrington, D.P.S.M. (U. of Vic.), B.A., Dip.Ed. (Brit. Col.), Coordinator of School Experiences (Secondary)

## 1.0 PROGRAMS OFFERED BY THE FACULTY OF EDUCATION

### 1.1 UNDERGRADUATE PROGRAMS

**NB: All degree programs are subject to quota.**

#### 1.1.1 BACHELOR OF EDUCATION (ELEMENTARY CURRICULUM) DEGREE .....page 176

This is a five year program in elementary teacher preparation leading to a degree in Education and to teacher certification. The basic preparation is for classroom generalists, although some specialization is included. Students may begin the program at a regional college and transfer to the University for Year Two or Year Three. A Standard Certificate is normally available after Year Four on this program; the degree and a Professional Certificate are granted after Year Five. The Physical Education Specialist program requires completion of the degree for initial certification which will be the Professional Certificate.

#### 1.1.2 BACHELOR OF EDUCATION (SECONDARY CURRICULUM) DEGREE .....page 181

The Faculty of Education is revising its secondary teacher education programs. The five year B.Ed. regular degree program will continue for students currently in the program and for new students accepted in the teaching areas of Art, Music and Physical Education. Art or Music may be taken as a single teaching area or in combination with an approved second teaching area. Physical Education must be taken in combination with an approved second teaching area. These three areas are also available in the post degree professional program.

#### 1.1.3 BACHELOR OF EDUCATION DEGREE

##### a. Elementary .....page 179

This is a two year post degree professional program for university graduates who wish to become elementary school classroom teachers. Completion of the program qualifies candidates for teacher certification and a degree in Education.

##### b. Secondary .....page 185

This is a two year post degree professional program for university graduates who wish to become secondary school teachers. Completion of the first year qualifies candidates for a teaching certificate. Those who complete the second year will qualify for a degree in Education.

#### 1.1.4 BACHELOR OF ARTS DEGREE

##### a. Honours and Major in Kinesiology .....page 186

This four year program offers a liberal arts and/or social science perspective in the study of fitness, sport, and physically active life styles.

##### b. Major in Leisure Service Administration-Cooperative Education .....page 187

This four year program prepares students to enter the field of recreational administration and provides preparation in the planning, implementation and supervision of programs in a wide range of recreational settings. The leisure service administration program is available only on a cooperative model basis.



### 1.1.5 BACHELOR OF SCIENCE DEGREE

These four year programs offer a science perspective in the study of fitness, sport and physical activity.

a. Honours and Major in Kinesiology ..... page 188

b. Major in Kinesiology-Cooperative Education ..... page 189

### 1.1.6 DIPLOMA IN TEACHER-LIBRARIANSHIP ..... page 189

This is a 15 unit summer-based program (equivalent to one year) designed to prepare teachers to function as teacher librarians in either elementary or secondary schools.

### 1.1.7 CERTIFICATE IN KÓDÁLY METHODOLOGY ..... page 190

This is a 9 unit summer-based program designed to prepare teachers of music at the elementary level in the principles and practices of the Kodály methodology.

## 1.2 PARTNERSHIP PROGRAMS

In partnership with Malaspina University College in Nanaimo, B.C. and Okanagan University College in Kelowna, B.C. the University of Victoria offers a program leading to a baccalaureate degree in Elementary Education. Advisers at these colleges are able to provide information on admission to these programs.

## 1.3 GRADUATE PROGRAMS

Graduate degrees in Education are offered through the Faculty of Graduate Studies. General information about these degrees may be found on pages 288 and 317 of this Calendar.

Inquiries should be directed to the Dean of the Faculty of Graduate Studies, the Associate Dean of the Faculty of Education, or the Education Departmental Graduate Advisers. Students seeking teacher certification are referred to sections 7.0 and 9.0 below.

MASTER OF EDUCATION DEGREE ..... page 317

MASTER OF ARTS DEGREE ..... page 317

MASTER OF SCIENCE DEGREE ..... page 317

DOCTOR OF PHILOSOPHY DEGREE ..... page 317

## 2.0 ACADEMIC ADVICE

Students needing advice about any of the undergraduate courses or programs offered in the Faculty of Education (including the Post Degree Professional Programs) should consult the Education Advising Centre, Room A250, MacLaurin Building, or write to that office for information. E-mail may be directed to eac@uvvm.uvic.ca.

All undergraduate students registered in the Faculty are required to make a commitment to a particular program. Students should request a Record of Degree Program (RDP) from the Education Advising Centre as soon as is practicable following admission to the Faculty. RDP's will be based on current Faculty regulations. All previously completed work will be considered in relation to the student's choice of program and teaching areas. The Faculty reserves the right to review any program or course work that is deemed to be outdated.

All students are advised to confirm program requirements with the Advising Centre before registering in any session.

## 3.0 ADMISSION TO THE FACULTY OF EDUCATION

Applicants for admission to the Faculty of Education must meet general University requirements described on pages 9-13, as well as general Faculty and specific program requirements.

The University of Victoria reserves the right to limit enrollment in the Faculty of Education and to refuse admission to the various programs of the Faculty. Such factors as available space and facilities, teaching positions available in the schools, academic qualifications, general suitability of the applicant for teaching, physical abilities, and English usage will be taken into account.

Applications for admission to the Faculty, transcripts and all other related documentation must be received by the following dates:

|   |            |
|---|------------|
| Professional year and post degree professional programs | 31 January |
| All physical education programs                         | 31 January |
| Elementary program                                      | 15 May     |
| Secondary program                                       | 15 May     |

Final transcripts with grades for courses in progress after January 31 must be received by May 31.

## 3.1 GENERAL FACULTY ADMISSION

The general requirements for admission to the Faculty of Education are:

1. at least 12 units of credit including 3 units of English; and
2. a sessional grade point average of at least 3.00 on the most recent session and, if that session is less than 12 units, a grade point average of at least 3.00 on a cumulative total of the most recent 12 units; and
3. admission interview (see below); and
4. all requirements for admission must be complete by April 30 and must be documented by May 31, except where otherwise specified (see 3.0 above).

Specific program admission requirements are given under the description of each program. ALL PROGRAMS ARE SUBJECT TO QUOTA. The Faculty is reviewing admission requirements. Please contact the Education Advising Centre for information.

## 3.2 INTERVIEW REQUIREMENT

Individual interviews may be required as deemed appropriate by the Faculty. The professional judgement of those conducting the interviews will be deemed sufficient grounds for recommending the acceptance or rejection of an application. A candidate whose suitability for teaching is questioned by an interviewer will be referred to a Review Committee. Appeal procedures are available.

## 3.3 QUOTA RESTRICTIONS

Admission to the Faculty of Education is restricted by quotas. Not all qualified applicants will necessarily be accepted.

Selection criteria have been established by the Faculty. Further details are available from the Faculty of Education Advising Centre and the School of Physical Education.

## 3.4 WRITTEN ENGLISH COMPETENCY REQUIREMENT

All Education students must satisfy the written English competency requirement of the Faculty prior to acceptance into professional year. This requirement may be satisfied in one of the following ways:

1. Completion of English 115 with a grade of 4.00 or better as part of the required 3 units or in addition to the 3 units of approved English.
2. Completion of English 121 and 122 or 150 and 151 (or equivalent literature courses) with a grade point of 5.00 or better as the 3 units of approved English.
3. Completion of the English 115 Equivalency Test (EET) at a 4.00 level or better in addition to the required 3 units of approved English.
4. Completion of English 215 with a grade of 3.00 or better in addition to the 3 units of approved English.
5. 6 units of approved English with a grade point average of at least 4.00.
6. Successful appeal to the Faculty Appeals and Adjudication Committee for acceptance of work other than that indicated above.

## 3.5 LIMITATIONS OF CREDIT FOR CERTIFICATED TEACHERS

Applicants for admission or acceptance on a degree program who have completed basic professional training may be granted up to 18 units of credit for that professional training towards the Bachelor of Education degree. This is granted at the discretion of the Faculty Appeals and Adjudication Committee.

All accepted candidates are referred to section 4.3 concerning currency of course work.

Teachers who have not taken any courses applicable to their programs in the last 4 years and/or teachers whose professional training was not completed within ten years prior to their application or reapplication to the Faculty must submit the following for the Committee's consideration:

1. resume of all teaching experience including dates, locations and grade levels, and indicating whether full time, part time, or substitution; and
2. copies of the most recent Superintendent's and/or Principal's Reports; and
3. letter(s) from Principal(s) attesting to teaching effectiveness in substitution roles if applicable; and
4. copy of Teacher's Card as issued by the B.C. College of Teachers.



## 4.0 ACADEMIC REGULATIONS

### 4.1 STANDING

#### 4.1.1 Sessional Grade Point Average

The sessional grade point average is based only on courses which have a unit value. Courses bearing the grade COM are ignored. A sessional grade point average is found by multiplying the grade points for all the grades, and dividing the total grade points by the total number of units.

#### 4.1.2 Minimum Sessional Grade Point Average

Students in the Faculty of Education must obtain a GPA of at least 3.00 (C+) on every session attended. Students who receive a sessional GPA less than 3.00 will be required to withdraw from the Faculty, and if the GPA is less than 2.00, further sanctions will be imposed by the University (see page 22).

To re-enter the Faculty students must apply for readmission under the prevailing admission requirements at the time of their re-application. In programs with quotas this may mean considerable course work will be necessary to raise the GPA sufficiently. In programs not subject to quotas, the application for readmission is subject to approval of the Faculty Appeals and Adjudication Committee. All students required to withdraw from the Faculty must complete a minimum of 6 units of approved course work before they may re-apply for admission.

Students who have been readmitted after having been required to withdraw and whose sessional GPA again falls below 3.00 will be required to withdraw from the Faculty of Education for a period of five years.

Cooperative Education students in Kinesiology and Leisure Service Administration who do not obtain a sessional GPA of at least 3.50 will have their academic performance reviewed and may be placed on probation or required to withdraw.

An appeal process exists within the Faculty to address student concern on the application of any of the above procedures. Details may be obtained from the Education Advising Centre.

#### 4.1.3 Certification

For the purpose of determining eligibility for a teaching credential, successful completion of the professional year, or professional component in the case of the post degree programs, requires a grade point average of at least 3.00 on all courses taken that are applicable to the professional year or professional component. Students who do not obtain an average of at least 3.00 will not be reported as eligible for certification, and normally will be required to withdraw from the Faculty.

Teachers accepted on the elementary degree program must obtain a grade point average of at least 3.00 on at least 30 units of courses required to complete Years One to Three in order to establish eligibility for a teaching credential.

### 4.2 WITHDRAWAL

The Faculty reserves the right at any time to require any student to withdraw from the Faculty where it believes on consideration of scholarship, professional fitness or professional conduct that the student is unsuited for the teaching profession. Unsatisfactory performance in professional seminars may be considered reason to require a student to withdraw from the Faculty.

### 4.3 CURRENCY REQUIREMENT FOR DEGREE AND PROGRAM COMPLETION

The Faculty of Education reserves the right to impose currency requirements for degree/program completion. Course work more than five years old will be subject to a review to determine if its content is outdated. Course work deemed to be outdated by Departments or the School of the Faculty will have to be replaced or updated.

The professional years of the Education degree programs are expected to be completed within one year.

The elementary post degree program should be completed within the two allotted years. The professional component of the secondary post degree professional program is three terms in length and should be completed in three consecutive terms, while five additional years are allowed for completion of this degree.

The application of any course work to a degree outside these limitations will be at the discretion of the Faculty Appeals and Adjudication

Committee. In cases where a program is not completed within the allowable time limits, the Committee may authorize extensions following a review of all course work taken. Such extensions may require updating work and/or other additional work to meet current Faculty requirements.

## 4.4 REGULATIONS CONCERNING PRACTICA

### 4.4.1 General

Through the Faculty of Education, the University reserves the right to approve any school that provides placements for student practica, and to change any placement assigned to a student. The student, however, has the right to be informed in writing of the reasons for any change in placement. While the University accepts a responsibility to provide a sufficient number of practicum opportunities to serve the needs of all registered students, a student may be required to withdraw from a practicum course if none of the available practicum agencies will accept that particular student.

### 4.4.2 Dates

The dates of practica will be established for each program, and will be announced to the students involved at the beginning of each term.

### 4.4.3 Attendance

Regular attendance during practicum is required. Students are expected to notify the school whenever practicum appointments cannot be kept, and also to inform their Faculty Supervisor.

### 4.4.4 Unethical or Unprofessional Behaviour

It is the responsibility of instructors to inform students of the criteria by which unethical or unprofessional behaviour will be judged in the practicum setting. Instructors who refuse students continued participation in a practicum for misconduct or repeated absence must immediately discuss the matter with the Director of Professional Studies, who shall then either inform the students of the conditions under which they may resume participation in the practicum or require them to withdraw from the practicum and inform them of the reasons for this in writing.

All students in the Faculty of Education placed in schools for teaching practica will be subject to the provisions of the *School Act* and the B.C.T.F. Code of Ethics. Any such student may be required to withdraw from a practicum for violation of any part of the *School Act*, or B.C.T.F. Code of Ethics or upon a written order from the Board of School Trustees in the district where the student is placed.

### 4.4.5 Denial and Withdrawal

#### (a) Denial

Students will be denied the practicum experience if their pre-practicum preparatory work is considered unsatisfactory by the Director of Professional Studies.

#### (b) Required Withdrawal

Students may be required to withdraw from the practicum with a failing grade if their performance in the practicum or their practicum preparation is considered unsatisfactory by the Director of Professional Studies.

#### (c) Voluntary Withdrawal

Students seeking voluntary withdrawal from a practicum, whether permanent or temporary, must receive permission to do so from the Director of Professional Studies.

#### (d) Notification of Withdrawal

Students who withdraw voluntarily from a practicum must notify the Director of Professional Studies in writing. Students who are required to withdraw from a practicum must make an appointment to see the Director of Professional Studies.

### 4.4.6 Readmission

If students who have withdrawn from a practicum for whatever reason later wish to reenter the practicum they must apply to the Faculty Appeals and Adjudication Committee for readmission to the course, and should not assume that readmission is guaranteed.

### 4.4.7 Appeals

Students may follow regular appeal procedures within the Faculty.



## 4.5 CREDIT FOR SKILL PERFORMANCE AND ANALYSIS COURSES

Skill Performance and Analysis course credit is limited as indicated below:

1. B.Ed degrees (elementary and secondary curricula)
  - (a) Physical Education teaching areas and specialist program — the number of units specified in the individual degrees for activities.
  - (b) Physical Education Concentration — 1½ units beyond the concentration.
  - (c) Non-Physical Education teaching areas — 3 units.
2. B.A. degree in Kinesiology — 1½ units beyond the program requirements.
3. B.Sc. degree in Kinesiology — 1½ units beyond the program requirements.
4. B.A. degree in Leisure Service Administration — 1½ units beyond the program requirements.

## 4.6 CREDIT FOR STUDIES UNDERTAKEN AT OTHER INSTITUTIONS

Students who plan to undertake work at other institutions are required to seek prior approval from the Education Advising Centre if they wish such courses to be credited toward a degree at the University of Victoria.

Students are responsible for ensuring that transcripts for all attempted coursework at all other institutions are submitted to Records Services. A minimum sessional grade average of C+ is required to maintain standing in the Faculty.

## 4.7 GRADUATION REQUIREMENTS

Students should refer to the general statements on page 23 of this Calendar. In exceptional cases when programs do not include enough 300 or 400 level courses to satisfy 21 units in the degree, the Dean may approve the inclusion of courses at the 700 level. In addition, to be eligible for a Bachelor of Education degree, the candidate must normally have earned:

1. a passing grade in each of the courses comprising the degree program;
2. a grade point average of at least 3.00 on the work of the professional year;
3. a grade point average of at least 4.00 as specified in section 8.1.2 in each of the teaching areas on the secondary program;
4. a grade point average of at least 3.00 on all work taken subsequent to the professional year. Failed courses will be counted in computing the grade point average.

## 4.8 GRADUATING AVERAGE

The graduating average of a student in the Faculty of Education shall be determined as the weighted average of the grade point values of the letter grades (other than COM) assigned to 300, 400 and 700 level courses taken or challenged at this University and accepted for credit in the student's program in the Faculty.

Except for B.A. and B.Sc. Honours programs (see sections 10.0 and 11.0), students whose graduating averages are 6.50 or higher will graduate with the notation "With Distinction".

## 5.0 PROFESSIONAL PREPARATION

### 5.1 SCHOOL EXPERIENCE, STUDENT TEACHING AND SEMINARS

School experience, student teaching and seminars form an integral part of the elementary and secondary programs. Requirements for these components of the Bachelor of Education elementary programs are outlined in the course descriptions of ED-P 287, 387, 787 and 797 and for the secondary programs in the course descriptions of ED-P 398, 498, 798, 780 and 790.

Students should be aware that all arrangements for school experience and student teaching are made through the School Experiences Office which is located in the MacLaurin Building.

Students should note that School Districts may refuse placements and require students to withdraw from practica for failure to abide by the School Act or the British Columbia Teachers' Federation Code of Ethics.

### 5.1.1 Elementary Programs

All Elementary Education students undertaking school experience during the year must be prepared to travel to any school in the three local school districts of Victoria, Sooke and Saanich. In order to do this, students should budget an additional \$100 to \$150 for transportation. Because of the heavy use of the three local school districts for school experience in the fall and winter and because it is considered important that students gain varied experiences, students should note that they will be required to undertake the final practicum in April-May in selected districts outside the Victoria, Sooke and Saanich districts. Extra expenses will be involved and students should budget accordingly.

#### ED-P 287

Normally students will be required to attend seminars and undertake a two week school experience following final examinations.

#### ED-P 387

Students are required to attend seminars and undertake a two week school experience following final examinations.

#### ED-P 787 or 797

Professional year begins Tuesday, September 5, 1995 with an orientation session on campus. Students are assigned to a school for further orientation which takes place Wednesday through Friday in the school. This is followed by Tuesday visits to the same school in preparation for a six week practicum later in the fall. The final six week practicum from April to mid May will be undertaken in selected districts across the province.

Attendance at orientation, school experience activities, and classes is mandatory.

Students in professional year should be aware that they must complete all course requirements before they will be allowed to take the final practicum.

### 5.1.2 Secondary Programs

#### ED-P 398

Students are required to attend seminars and undertake school experience of ten half days in local schools. A two week post session practicum may be required.

#### ED-P 498

Students are required to attend seminars and undertake a two week school experience following final examinations.

#### ED-P 798

Bachelor of Education students in the secondary professional year and special music students in the secondary post degree program will commence classes on Wednesday, September 6, 1995.

Secondary students in the regular post degree professional program will commence classes on Tuesday, July 4, 1995.

The school experience component of the secondary professional year, including the post degree program, commences with the opening of public schools in January 1996. During the January period students will be required to attend the student teaching seminar, to start ED-B 430, and to observe classes in the assigned school. With the start of the school's second semester, students will begin a 12 week practicum. This practicum will conclude near the end of April 1996.

The practicum placement is a mandatory part of this program. While some school placements will be in the three local school districts of Victoria, Sooke and Saanich, some candidates will be required to take their practicum in other specified school districts in B.C.

Students in professional year should be aware that they must complete all summer and fall term course requirements before they are allowed to take the practicum. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies.

## 5.2 TEACHER CERTIFICATION

### 5.2.1 The College of Teachers

Current legislation requires that every person appointed or retained as a teacher in a public school be a member of the College of Teachers and hold a valid certificate of qualification issued by the College.

It is the responsibility of the teacher to make application to the Registrar of the College of Teachers for initial certification, or for a change in certification, and to provide all necessary documents.



Persons convicted of a criminal offense and considering a teaching career should write to the B.C. College of Teachers for clarification of their status before undertaking a teacher education program.

### 5.2.2 The Teacher Qualification Service

Salary categories for teachers are established by the Teacher Qualification Service upon application, and only when a British Columbia teaching credential has already been granted by the College of Teachers. Categories are assigned on the basis of completed years of academic and professional preparation. Partial years are not considered.

### 5.2.3 Procedures and Documentation

Application forms for the College of Teachers and the Teacher Qualification Service are available from Records Services or from the School Experience Office, as well as directly from the agencies.

Transcripts in support of applications to these bodies should be ordered on the Report Application card available from Records Services, the Education Advising Centre or the School Experience Office.

## 6.0 BACHELOR OF EDUCATION (ELEMENTARY CURRICULUM)

### 6.1 ADMISSION REQUIREMENTS

#### 6.1.1 Program Admission

Initial admission to the elementary degree program may be granted only after completion of at least one year of university level studies acceptable to the Faculty of Education. Individual interviews may be required as deemed appropriate by the Faculty.

The requirements for admission to the regular elementary programs are:

- admissibility to the university; and
- at least 12 units of credit including 3 units of English; and
- a sessional grade point average of at least 3.00 on the most recent session and, if that session is less than 12 units, a grade point average of at least 3.00 on a cumulative total of the most recent 12 units.

Teachers who wish to be accepted on this program with credit from other institutions including professional training, must first make application in the normal manner to University Admission Services as detailed on page 12 under Application for Admission. Those whose studies commenced more than ten years ago are also referred to the section 3.5 above, Limitations of Credit for Certificated Teachers.

#### 6.1.2 Professional Year Admission

The requirements for admission to the professional year of any of the elementary programs described below are:

- applications must be submitted to Records Services no later than January 31;
- all courses specified for the preprofessional years of any program must be complete; and
- successful completion of the Faculty's written English competency requirement as outlined in section 3.4; and
- a grade average of at least 3.00 (UVic C+) must have been obtained on
  - the most recently completed session; and
  - the most recent two years of at least 30 units.

Normally all of the above requirements must be complete by April 30 of the year in which an applicant wishes to begin the professional year. Any applicants unable to meet this deadline who wish to complete course requirements during the summer session must appeal to the Faculty Appeals and Adjudication Committee, c/o the Education Advising Centre, indicating why they believe their circumstances to be unusual, and requesting permission to be considered for admission on the basis of the results of their work during the summer period. The Committee will not accept work completed during the summer to raise a deficient grade point average, but may accept courses taken to meet requirements when the grade point average is already sufficient.

Applicants for the professional year should be aware that the Faculty of Education has maximum enrollment limits and that therefore all qualified applicants are not guaranteed acceptance. Applicants will be notified regarding their admissibility as soon as possible, but final acceptance may not be until late July.

## 6.2 PROGRAM

### 6.2.1 General

The elementary program provides course work and practicum experience designed to produce a well qualified elementary school teacher. The program leads to teacher certification in British Columbia. Certification is required for employment in the public school system. On conclusion of the program, the degree Bachelor of Education (Elementary Curriculum) is granted by the University of Victoria.

Records of Degree Program must be established by students on admission to the Faculty. Records of Degree Program of students who discontinue their studies in excess of four years will be considered out of date and subject to review.

The program is available in a number of formats. The format a student will follow is determined to a certain extent by the amount of credit the student has accumulated prior to acceptance. One variation is provided specifically for students who want to complete the first two years at a regional college. Two variations are provided for students in physical education. These formats are described in further detail below.

Basically the program calls for completion of specified academic courses (Arts and Sciences), professional courses (Education courses), and further work in specialization. Specialization is available in a number of different teaching areas and concentrations, also described below. In many cases there is room in the program for electives (courses of the student's choice).

|   |               |
|---|---------------|
| Required courses in Education .....         | 34½-42½ units |
| Required courses from other faculties.....  | 15 units      |
| Teaching area/concentration/electives ..... | 19½-25½ units |

It should be noted that a minimum of 21 units in this degree must be upper level courses, i.e. courses numbered at the 300 or 400 level.

Particular attention should be paid to the grade point average requirements of the Faculty (see section 4.1). A grade point average of at least 3.00 must be obtained on all sessions attended in order to remain in the Faculty and to proceed from year to year.

Graduation requirements are found on page 23 and section 4.7 above.

### 6.2.2 Professional Year

In each of the formats below, one of the years is designated the professional year. This year is devoted mainly to the study of the curriculum and methods of instruction for the elementary school and to lengthy periods of practice teaching in the school classrooms. Certification is possible on successful completion of this year.

The special admission requirements for this year (see 6.1.2 Professional Year Admission above) should be noted.

Prior to entry students must decide whether they wish to teach primary, i.e. grades one to three, or intermediate, i.e. grades four to seven. Whenever possible, practica placements will be made according to the student's choice. Having taken practica at one level does not restrict one to teaching at that level.

The professional year is a coordinated program of courses that may be offered in two alternative patterns. The regular pattern begins in September and terminates mid May, and includes two six week periods of practica. The alternative internship pattern (which is subject to funding) begins in July and terminates mid May, and includes a two month and a four month practicum.

The regular professional year will commence on Tuesday, September 5, 1995. All accepted students are required to attend a meeting in the MacLaurin Building where registration will be confirmed and seminars and school placements will be assigned. Elementary program students should be prepared to spend Wednesday, Thursday and Friday in local elementary schools.

Because of the classroom involvement off campus the scheduling of courses in this program is somewhat different from that of other courses. Deviations from the total professional year program, additions to or deferrals of courses, are not normally permitted. Permission of the Education Advising Centre is required for any exception.

### 6.2.3 Transfer Program

Qualified teachers who wish to transfer to this degree program should contact an Adviser in the Education Advising Centre for advice regarding course requirements. The program will be modified on the basis of previous training and experience. In cases where professional training was completed more than nine years ago, the Faculty Appeals and Adjudication Committee will determine what credit may be applied to the degree program (see section 3.5).



## 6.2.4 Program Formats

### (a) Regular Program

This program is designed for students who plan to enter the Faculty in their second year, having completed first year in another faculty at UVic, in a college or in another university.

Those who wish may leave the program on completion of Year Four and seek employment as a teacher. The fifth year subsequently may be completed in a number of ways, e.g. through summer studies, extension, etc. Please note there is a time limit on acceptance of credit toward degrees (see section 4.3).

#### Year One (Arts and Science/College): Orientation

|  |           |
|--|-----------|
| ENGL 115/116 or 121/122 or 150/151 .....   | 3         |
| HIST 130 (or other Canadian history with<br>permission of the Education Advising Centre) .....       | 3         |
| MATH 160 A/B or other approved mathematics .....   | 3         |
| <sup>3</sup> SNSC 145A or B or C or other science approved<br>by the Education Advising Centre ..... | 1½        |
| Elective(s) from faculties other than Education .....  | 4½        |
| <b>Total</b> .....   | <b>15</b> |

#### Year Two: The Learner

|   |            |
|---|------------|
| <sup>2</sup> AE 204 .....   | 2          |
| DE 204 .....  | 2          |
| ED-D 305 .....  | 3          |
| ED-P 287 .....  | 1½         |
| <sup>4</sup> ME 204 .....   | 2          |
| PE 247 .....  | 2          |
| <sup>3</sup> SNSC 145A or B or C or other sciences approved<br>by the Education Advising Centre ..... | 1½         |
| Elective(s) approved by Educating Advising .....  | 1½         |
| <b>Total</b> .....  | <b>15½</b> |

#### Year Three: Learning in Schools

|   |           |
|---|-----------|
| ED-B 331 .....                                    | 1½        |
| ED-B 359 .....                                    | 1½        |
| ED-B 430 .....                                    | 1½        |
| <sup>5</sup> ED-D 300 .....                       | 1½        |
| ED-D 400 .....                                    | 1½        |
| <sup>5</sup> ED-P 387 .....                       | 1½        |
| <sup>6</sup> THEATRE 150 or non-Ed elective ..... | 1½        |
| Teaching area/concentration/electives .....       | 4½        |
| <b>Total</b> .....                                | <b>15</b> |

#### Year Four: Teaching Theory and Practice (The Professional Year)

|                    |           |
|--------------------|-----------|
| ED-B 748 .....     | 1½        |
| ED-B 749 .....     | 1½        |
| ED-D 337D .....    | 1½        |
| ED-E 743 .....     | 2         |
| ED-E 745 .....     | 2         |
| ED-E 746 .....     | 2         |
| ED-P 787 .....     | 4½        |
| <b>Total</b> ..... | <b>15</b> |

Eligible for STANDARD CERTIFICATE

#### Year Five: Teaching Specialization

|  |           |
|--|-----------|
| ED-B 420, 423, 425, 427 .....                          | 3         |
| ED-B 450 (Primary)<br>or ED-B 451 (Intermediate) ..... | 1½        |
| Teaching area/concentration/electives .....            | 10½       |
| <b>Total</b> .....                                     | <b>15</b> |

Eligible for PROFESSIONAL CERTIFICATE

**Total units for degree** ..... 75½

#### Notes:

<sup>1</sup> AE 204, DE 204, ME 204, PE 247, and ED-D 305 are core courses in which the learner is the focus. Register in the complete package if possible.

<sup>2</sup> Those who choose the Art Education teaching area should take AE 103 in lieu of 204.

<sup>3</sup> Students are expected to acquire background in each of three areas of general science: biological, physical, and earth science. All science requirements must be completed by the end of the second year of the B.Ed. regular program.

• An elective may be substituted for the biological science requirement if Biology 11 has been completed within the past ten years.

• An elective may be substituted for the physical science requirement if Physics 11 has been completed within the past ten years.

• An elective may be substituted for the earth science requirement if either Earth Science 11 or Geology 12 has been completed within the past ten years.

Contact the Education Advising Centre for approval of science courses other than those indicated. (Note that any of PE 141, 241A, or 241B will meet the biological science requirement.)

<sup>4</sup> Those who choose the Music Education teaching area should take ME 206 in lieu of ME 204. The extra ½ unit will then become an elective.

<sup>5</sup> ED-D 300 and ED-P 387 should be taken concurrently in the year immediately preceding Year Four: Teaching Theory and Practice (The Professional Year).

<sup>6</sup> Theatre 150 may be required upon the recommendation of the Department of Arts in Education.

<sup>7</sup> Written English competency will be required prior to entrance into professional year. See section 3.4.

### (b) Regular Program with Physical Education Teaching Area

Students who want physical education in the elementary program should consult an Adviser in the Education Advising Centre to determine whether they want the Regular Program with a concentration or a teaching area in physical education.

Acceptance in the program is limited. The deadline for receipt of application forms is January 31. A special set of application forms is required and may be obtained by writing to the School of Physical Education after the 1st of November. Applications will be considered from those who meet the following:

- the general Faculty program admission requirements specified in 3.1
- interview by the School of Physical Education
- academic preparation which includes the following:
 

|   |    |
|---|----|
| PE 106, 115 and one of 121, 122, or 123 ..... | 1½ |
| PE 141 .....                                  | 1½ |
| PE 143 .....                                  | 1½ |

Normally College students who wish acceptance in this program must plan to transfer to UVic for their second year.

#### Year One (Arts and Science/College)

|  |           |
|--|-----------|
| ENGL 115/116 or 121/122 or 150/151 .....   | 3         |
| HIST 130 (or other Canadian History with<br>permission of the Education Advising Centre) ..... | 3         |
| MATH 160 A/B or other approved mathematics .....   | 3         |
| PE 106, 115 and one of 120, 121, 122 .....   | 1½        |
| PE 141 .....   | 1½        |
| PE 143 .....   | 1½        |
| PE 144 .....   | 1½        |
| <b>Total</b> .....   | <b>15</b> |

#### Year Two

|                              |            |
|------------------------------|------------|
| AE 204 .....                 | 2          |
| DE 204 .....                 | 2          |
| ME 204 .....                 | 2          |
| ED-D 305 .....               | 3          |
| ED-P 287 .....               | 1½         |
| PE 241B .....                | 1½         |
| PE 245 .....                 | 1½         |
| <sup>1</sup> SNSC 145A ..... | 1½         |
| <sup>1</sup> SNSC 145B ..... | 1½         |
| <b>Total</b> .....           | <b>16½</b> |

#### Year Three

|   |           |
|---|-----------|
| ED-B 331 .....                            | 1½        |
| ED-B 359 .....                            | 1½        |
| ED-B 430 .....                            | 1½        |
| <sup>2</sup> ED-D 300 .....               | 1½        |
| ED-D 400 .....                            | 1½        |
| <sup>2</sup> ED-P 387 .....               | 1½        |
| PE 116 or 117, two of 120, 121, 122 ..... | 1½        |
| PE 346 .....                              | 1½        |
| PE 367 .....                              | 1½        |
| PE 377 or 387 .....                       | 1½        |
| <b>Total</b> .....                        | <b>15</b> |



**Year Four (The Professional Year)**

|                                   |    |
|-----------------------------------|----|
| ED-B 748.....                     | 1½ |
| ED-B 749.....                     | 1½ |
| ED-D 337D.....                    | 1½ |
| ED-E 743.....                     | 2  |
| ED-E 745.....                     | 2  |
| ED-E 746.....                     | 2  |
| ED-P 787.....                     | 4½ |
| Eligible for STANDARD CERTIFICATE |    |

**<sup>3</sup>Year Five**

|   |    |
|---|----|
| ED-B 420, 423, 425, or 427.....                             | 3  |
| ED-B 450 (Primary)  |    |
| or ED-B 451 (Intermediate).....                             | 1½ |
| PE 344.....   | 1½ |
| PE 377 or 387.....  | 1½ |
| Electives approved by the<br>Education Advising Centre..... | 6  |
| Elective.....   | 1½ |
| Eligible for PROFESSIONAL CERTIFICATE                       |    |

**Total units for degree.....** 76½

**Notes**

<sup>1</sup> For Science requirements see Note 3 under Regular Program.

<sup>2</sup> ED-D 300 and ED-P 387 should be taken concurrently in the year immediately preceding the Professional Year.

<sup>3</sup> Written English Competency is required prior to acceptance into Professional year; see section 3.4.

**(c) Transitional Program**

This program is intended for students who plan to attend a regional college to complete the requirements of Years One and Two prior to coming to UVic to enter the Faculty of Education and the elementary program for the third year of studies.

**Years One and Two (College)**

|  |     |
|--|-----|
| ENGL 115/116 or 121/122 or 150/151.....  | 3   |
| HIST 130 (or other Canadian history<br>with permission of Education Advising Centre).... | 3   |
| MATH 160 A/B or other approved mathematics.....  | 3   |
| <sup>1</sup> Approved Laboratory Science.....  | 4½  |
| Electives/concentration/teaching area.....   | 16½ |

**Year Three: The Learning Child**

|                          |    |
|--------------------------|----|
| <sup>2</sup> AE 204..... | 2  |
| <sup>3</sup> DE 204..... | 2  |
| ED-B 331.....            | 1½ |
| ED-B 430.....            | 1½ |
| ED-D 403.....            | 4½ |
| ED-P 387.....            | 1½ |
| <sup>4</sup> ME 204..... | 2  |
| PE 247.....              | 2  |
| 17                       |    |

**<sup>5</sup>Year Four: Teaching Theory and Practice (The Professional Year)**

|                                   |    |
|-----------------------------------|----|
| ED-B 748.....                     | 1½ |
| ED-B 749.....                     | 1½ |
| ED-D 337D.....                    | 1½ |
| ED-E 743.....                     | 2  |
| ED-E 745.....                     | 2  |
| ED-E 746.....                     | 2  |
| ED-P 787.....                     | 4½ |
| 15                                |    |
| Eligible for STANDARD CERTIFICATE |    |

**Year Five**

|  |     |
|--|-----|
| ED-B 420, 423, 425, 427.....                     | 3   |
| ED-B 450 (Primary) or ED-B 451 (Intermediate) 1½ |     |
| Concentration/teaching area/electives.....       | 10½ |
| 15   |     |
| Eligible for PROFESSIONAL CERTIFICATE            |     |

**Total units for degree.....** 77

**Notes**

<sup>1</sup> Students are expected to acquire background in each of the three areas of general science: biological, physical, and earth science. All science requirements should be met before entry into Year Three.

- An elective may be substituted for the biological science requirement if Biology 11 has been completed within the past ten years.
- An elective may be substituted for the physical science requirement if Physics 11 has been completed within the past ten years.
- An elective may be substituted for the earth science requirement if either Earth Science 11 or Geology 12 has been completed within the past ten years.

Contact the Education Advising Centre for approval of science courses other than those indicated. (Note that any of PE 141, 241A, or 241B will meet the biological science requirement.)

Students who are having difficulty in meeting this requirement should consult an Adviser in the Education Advising Centre.

<sup>2</sup> Those who choose the Art Education teaching area should take AE 103 in lieu of AE 204.

<sup>3</sup> Theatre 150 may be required upon the recommendation of the Department of Arts in Education.

<sup>4</sup> Those who choose the Music Education teaching area should take ME 206 in lieu of ME 204. The extra ½ unit will then become an elective.

<sup>5</sup> Written English competency will be required prior to acceptance into Professional year. See section 3.4.

**6.3 TEACHING AREAS AND CONCENTRATIONS**

Every elementary program except (b) above (Regular with Physical Education Teaching Area) must include the requirements of one of the following teaching areas or concentrations. With approval of the Dean of the Faculty, students may be recommended for a degree with a teaching area or concentration outside of those offered by the Faculty. Students who do not enter the program for second year will likely find their choice somewhat limited and should consult an Adviser in the Education Advising Centre for further information. Students who encounter difficulty completing a teaching area or concentration should contact the Education Advising Centre for academic advice.

**ART EDUCATION:**

**Area:** AE 103; 200 or 201; 205 or 208; 315; 316 or 317; 320 or 321; 401 (1.5); 3 units of approved courses from Art Education offerings and/or HA 120..... 15

While AE 103 is strongly recommended, with permission of the Elementary Art Adviser, AE 204 (formerly 101) plus an additional course may be acceptable in lieu. A grade of B or higher is required on AE 103 (or 204). Courses chosen to complete this area must be approved by the Adviser.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisites. Students should consult with the Adviser.

**Concentration:** AE 200 or 201; 205 or 208; 315, 316 or 317; 320 or 321; 401 (1.5); approved art elective..... 9  
[Core requirement — AE 103 or 204 (formerly 101)]

**DRAMA IN EDUCATION:**

**Area:** THEA 110, 181, 383, 481, ED-B 341..... 15

**NOTE:** DE 204 is required of all students. Students who choose this area are interested in expanding their understanding of theatre as an art form to enrich their teaching methodology.

**Concentration:** THEA 181, 481; THEA 383 or ED-B 341..... 9

**NOTE:** DE 204 is required of all students. Students who choose this concentration are looking for teaching skills and strategies which will enable them to integrate drama into their classroom teaching methodology.

**EARLY CHILDHOOD EDUCATION:**

**Area — Primary Emphasis:** ED-B 339\*, 341, 342, 440; ED-D 306; 6 units of approved options..... 15

**Concentration — Primary Emphasis:** ED-B 339\*, 341, 342, 440; ED-D 306..... 9



**Area — Pre-School/Kindergarten Emphasis:**

ED-B 339\*, 440, 441, 448; ED-D 306; ED-E 447; AE 320;  
ME 302; 3 units of approved options□\*\*.....15

**Concentration — Pre-School/Kindergarten Emphasis:**

ED-B 339\*, 440, 441, 448; ED-D 306;  
ED-E 447 .....9

\* Experienced teachers should consult with Early Childhood Education instructors to substitute an approved option.

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the above required area courses in Year Five.

\*\* Only the 15 unit Pre-School/Kindergarten AREA meets requirements for certification as a supervisor by the Community Care Facilities Licensing Board.

**EDUCATIONAL TECHNOLOGY:**

**Concentration (only):** ED-B 360, 361, 362, 463;  
ED-D 338, 438 .....9

**ENGLISH AS A SECOND LANGUAGE:**

**Concentration (only):** LING 360, 374, 375;  
ED-B 490.....9

**ENVIRONMENTAL EDUCATION:**

**Area:** ED-E 473; SNSC 345B, 373; PE 270;  
7½ units of approved options□ .....13½

**Concentration:** ED-E 473; SNSC 345B, 373;  
PE 270; 3 units of approved options□ .....9

**FRENCH LANGUAGE EDUCATION:**

**Area (only):** FREN 181, 182, 220, 291, 292, 302,  
350, 488H; ED-B 390 .....16½

**LANGUAGE ARTS:**

**Area:** ED-B 342, 343A or B, 349, 442; 6 units of  
approved options□ .....15

It is strongly recommended that 6 units be chosen from a faculty other than Education.

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the required courses in Year Five.

**Concentration:** ED-B 341, 342, 343A or B, 349 .....9

**LEARNING ASSISTANCE:**

**Area (only):** ED-B 442; ED-D 405, 415; ED-D 417  
or 316 plus an approved option□; ED-D 410A  
and/or 411A; ED-E 484 .....15

One of ED-B 420, 423, 425 or 427 may be taken in Year Three in order to accommodate the required courses in Year Five.

**LEARNING FOR LIVING:**

**Concentration (only):** ED-D 417, 433, 434; 414  
or 435A/B .....9

**MATHEMATICS EDUCATION:**

**Area:** 7½ units of approved mathematics\*;  
ED-E 438A, 443, 444, 484 and SNSC 343 .....15

\* A recommended sequence would be MATH 151, 102, 233A, 233C, C SC 110. Other approved courses are MATH 100, 101, 362, 368A; C SC 115; STAT 255, 256, 260, 261.

**Concentration:** ED-E 438A, two of 443, 444, 484;  
SNSC 343; and 3 units from C SC 110,  
MATH 102, 151, 233A, STAT 255, 256, 260, 261,  
or other electives approved by the Elementary  
Mathematics Adviser .....9

**MATHEMATICS/SCIENCE:**

**Area (only):** MATH 151 and 102 (or 100); 3 units of  
approved lab science; 3 units of approved  
mathematics; ED-E 438A and SNSC 343;  
3 units from ED-E 445A, 445B, SNSC 345A,  
approved science .....18

Mathematics and science courses must be approved by the Elementary Mathematics and Science Advisers.

**MUSIC EDUCATION:**

**Area:** ME 205; 300; 306; 309 or 310; 350; 400B;  
and three of 208 or 308, 219, 303A or E, 303C,  
303D, 319 .....15

(Core requirement — ME 206 or 204 with permission of the Elementary Music Adviser)

Students wishing to enter this area must first seek acceptance through the Department of Arts in Education. Satisfactory performance on a musical aptitude test will also be required.

Students in the Music Teaching Area will be placed in the music seminar in ED-P 787. The seminar sessions will operate as other 787 seminars with music content as the focus for discussion although other subject areas will be integrated to meet student needs.

**Concentration:** ME 205; two of ME 208, 300, 309,  
310; ME 306; one of ME 400B, 400C or  
approved Kodály course .....9

**PHYSICAL EDUCATION:**

**Area:** Refer to 6.2.4 for information regarding acceptance into this area.

PE 106, 115, 116 or 117, 120, 121, 122;  
PE 141, 143, 144, 241B, 245, 344, 346

367, 377, 387 .....18

**Concentration:** PE 106, 115, 245, 346, 367, 377,  
387, and one of 120, 121, 122 .....9

**REMEDIAL METHODOLOGY:**

**Concentration (only):** ED-B 442; ED-D 411A, 415;  
ED-E 484 .....9

**SCIENCE:**

**Area:** 9 units from astronomy, biology, chemistry,  
earth and ocean sciences, environmental studies,  
microbiology or physics with not more than 3 units  
in any one area; and ED-E 438A, 445A, 445B,  
SNSC 345B; (MATH 100 may be included if it is  
required as a co-requisite course, and is not used to  
satisfy the mathematics core requirement) .....15

**Concentration:** ED-E 438A, 445A, 445B,  
SNSC 345B; and 3 units in science or science  
education approved by the Elementary Science  
Adviser .....9

**SOCIAL STUDIES:**

**Area:** GEOG 101A and 101B (or approved higher  
level geography); 3 units from ANTH 100A,  
100B, 200A, 200B, 321, 339A, 339B,  
SOCI 100; ED-E 438A, 446, SNSC 346; 4½ units  
of approved Social Studies options□ .....15

The area must include a minimum of 9 units of upper level courses.

**Concentration:** ED-E 438A, 446, SNSC 346; and  
4½ units of social studies electives approved by  
the Elementary Social Studies Adviser .....9

**ACADEMIC SUBJECT AREAS:** With approval of the Education Advising Centre, 15 unit teaching areas from a general program in Arts and Science may be acceptable.

**OPTIONS: □**

A list of approved options is available in the Education Advising Centre.

## 7.0 BACHELOR OF EDUCATION POST DEGREE PROFESSIONAL PROGRAM — ELEMENTARY

**7.1 ADMISSION****7.1.1 Admission to the Program and Year One**

Maximum enrollments have been established; therefore the Faculty cannot guarantee that all qualified candidates will be accepted. Accepted candidates will be notified as early as possible, but final acceptance may not be until late June.

The deadline for receipt of application forms is January 31. A special set of application forms is required and may be obtained by writing to the Education Advising Centre after the 1st of October. Please note that



application and evaluation fees, as well as all supporting transcripts and courses in progress forms, are required to be submitted with the special application form by January 31. Transcripts showing completion of work in progress during the January to April period and, where applicable, the degree, must be received by May 31. Individual interviews may be required as deemed appropriate by the Faculty.

Applications will be considered from those who meet the following requirements:

- (a) a degree, acceptable in content to the Faculty of Education Appeals and Adjudication Committee, from a recognized university; and
- (b) a grade point average of at least 3.00 (UVic C+) on the most recent session and on the most recent two years (30 units) attempted; (ie. to December 31) and
- (c) academic preparation which includes the following:

- <sup>1</sup> Approved English..... 3 units  
HIST 130 (or other Canadian History  
with permission of the Education Advising Centre)..... 3 units
- <sup>2</sup> Approved mathematics..... 3 units
- <sup>3</sup> Approved laboratory science..... 3 units

<sup>1</sup> The Faculty requires students to demonstrate competency in written English. For full information, see section 3.4. All English courses must be acceptable to the Faculty. Courses which are NOT normally considered as approved English include: creative writing, journalism, technical writing, children's literature and literature for young adults.

<sup>2</sup> The approved mathematics must normally have been completed within the past ten years.

<sup>3</sup> General science, biology, physics, chemistry, astronomy, geology, completed within the past ten years. Not required if the applicant presents a Bachelor of Music with Major in Music Education (Elementary) from the University of Victoria or an equivalent degree from another institution.

Students of exceptional ability who do not meet the stated admission requirements may appeal to the Faculty Appeals and Adjudication Committee for consideration. "Exceptional" may be considered in terms of high grade point average, relevant work experience, or unique academic qualifications.

### 7.1.2 Admission to Year Two

The deadline for receipt of application forms is January 31.

All course requirements of Year One must be complete with a grade point average of at least 3.00 by April 30 of the year of application. Requests for extension of this deadline will be considered by the Appeals and Adjudication Committee only if the applicant's current sessional grade point average is at least 3.00.

## 7.2. PROGRAM

### 7.2.1 General

The elementary post degree professional program provides course work and practicum experience designed to produce a well qualified elementary school teacher. The program leads to teacher certification and a Bachelor of Education degree.

The program is designed to be taken over two consecutive winter sessions. With permission of the Faculty Appeals and Adjudication Committee, the first year may be extended and taken part time over more than one winter session. The courses required in this year are scheduled according to the normal University timetable and extend from September 6, 1995 to the normal examination period in the following April. In addition a two week practicum is required following examinations.

It should be noted that the Faculty of Education requires a grade point average of at least 3.00 on all sessions attempted. Any session in which the average falls below 3.00 will result in a requirement to withdraw from the program and the Faculty. Neither certification nor the degree will be awarded if the Year Two grade point average is less than 3.00.

Graduation requirements are found on pages 23 and section 4.7 above.

### 7.2.2 Professional Year

The professional year is a coordinated program of courses devoted mainly to a study of the curriculum and methods of instruction for the elementary school and to lengthy periods of practice teaching in school classrooms. Because of the integration of the methods courses with the two practica, one in November/December and the other in April/May, it is required that this year be taken as a complete unit over one winter

session. Because the scheduling of courses in this year is not necessarily consistent with the University timetable, permission must be obtained from the Education Advising Centre to add any other course.

Prior to entry students must decide whether they wish to teach primary, i.e. grades one to three, or intermediate, i.e. grades four to seven. Wherever possible, practica placements will be made according to the student's choice. Having taken practica at one level does not restrict one to teaching at that level.

The professional year will commence on Tuesday, September 5, 1995. All accepted students are required to attend a meeting in the MacLaurin Building where registration will be confirmed and seminars and school placements will be assigned. Students should be prepared to spend Wednesday, Thursday and Friday in local elementary schools.

### 7.2.3 Program Formats

#### (a) Regular Program

##### Year One: The Learning Child

|   |           |
|---|-----------|
| AE 204.....                                 | 2         |
| ED-B 320 or other approved foundations..... | 1½        |
| ED-B 331.....                               | 1½        |
| ED-B 430.....                               | 1½        |
| ED-D 403.....                               | 4½        |
| ED-P 387.....                               | 1½        |
| ME 204.....                                 | 2         |
| PE 247.....                                 | 2.....16½ |

##### Year Two: Teaching Theory and Practice (The Professional Year)

|                       |            |
|-----------------------|------------|
| *ED-B 450 or 451..... | 1½         |
| ED-B 748.....         | 1½         |
| ED-B 749.....         | 1½         |
| ED-D 337.....         | 1½         |
| ED-E 743.....         | 2          |
| ED-E 745.....         | 2          |
| ED-E 746.....         | 2          |
| ED-P 787.....         | 4½.....16½ |

Total units for degree..... 33

Eligible for CERTIFICATION and DEGREE

\* Students enrolled in primary methods courses must take ED-B 450; those enrolled in intermediate methods courses must take ED-B 451.

#### (b) Special Music Program

This program is only for students who hold a Bachelor of Music degree with a Major in Music Education (Elementary) from the University of Victoria, or an equivalent degree from another institution.

##### Year One: (The Professional Year)

|   |            |
|---|------------|
| ED-B 420, 423, 425, or 427.....                       | 3          |
| ED-B 450 (Primary)<br>or ED-B 451 (Intermediate)..... | 1½         |
| ED-B 748.....   | 1½         |
| ED-B 749.....   | 1½         |
| ED-D 337.....   | 1½         |
| ED-E 743.....   | 2          |
| ED-E 746.....   | 2          |
| <sup>1</sup> ED-P 787.....                            | 4½.....17½ |

Eligible for CERTIFICATION

<sup>1</sup> Students in the Special Music Program will be placed in the music seminar in ED-P 787. The seminar sessions will operate as other 787 seminars with music content as a focus for discussion although other subject areas will be integrated to meet student needs.

##### Year Two: Degree Completion

|  |          |
|--|----------|
| ED-B 342 and 343A or 343B, or 349..... | 3        |
| SNSC 345A.....                         | 1½       |
| Approved AE.....                       | 1½       |
| Approved DE.....                       | 1½       |
| Approved PE.....                       | 1½       |
| Approved electives.....                | 6.....15 |

Total units for degree.....32½

Eligible for DEGREE



## 8.0 BACHELOR OF EDUCATION (SECONDARY CURRICULUM)

### 8.1 ADMISSION REQUIREMENTS

#### 8.1.1 Program Admission

The five year B.Ed. (Secondary Curriculum) regular degree program will continue for students currently in the program and for new students accepted in the teaching areas of Art, Music, and Physical Education. Art or Music may be taken as a single teaching area or in combination with an approved second teaching area. Physical Education must be taken in combination with an approved second teaching area. These three areas are also available in the post degree professional program.

Initial admission to the secondary degree program may be granted only after completion of at least one year of university level studies acceptable to the Faculty of Education. Quotas on admission to this program have been established. Not all eligible applicants will necessarily be admitted.

The requirements for admission to the secondary program are:

- (a) admissibility to the university; and
- (b) at least 12 units of credit including 3 units of English; and
- (c) a sessional grade point average of at least 3.00 on the most recent session and, if that session is less than 12 units, a grade point average of at least 3.00 on a cumulative total of the most recent 12 units; and
- (d) admissibility to a teaching area in art, music, or physical education.
  - i) ART: Admission requires approval of the Department of Arts in Education. Applicants must have obtained a grade of at least B on AE 103.
  - ii) MUSIC: Admission requires approval of the Department of Arts in Education. Applicants must have obtained a grade of at least B on ME 101 and must be interviewed by the Department.
  - iii) PHYSICAL EDUCATION: Admission requires approval of the School of Physical Education. The deadline for receipt of application forms is January 31. A special set of application forms is required and may be obtained by writing to the School of Physical Education after the 1st of November. Applicants must be interviewed by the School and have the following academic preparation:
 

|                                     |    |
|-------------------------------------|----|
| PE 115 plus two of PE 105-125 ..... | 1½ |
| PE 141 .....                        | 1½ |
| PE 143 .....                        | 1½ |

Teachers who wish to be accepted on this program with credit from other institutions including professional training, must first make application in the normal manner to University Admission Services as detailed on page 12 under Application for Admission. Those whose studies commenced more than ten years ago are also referred to section 3.5 above, Limitations of Credit for Certificated Teachers.

#### 8.1.2 Professional Year Admission

The requirements for admission to the professional year of the secondary program are:

- (a) Applications must be submitted to Records Services no later than January 31.
- (b) All courses specified for the preprofessional years of the program, with the exception of electives, must be complete. In addition, candidates presenting a second language must pass an oral competency examination.
- (c) Successful completion of the Faculty's written English competency requirement as outlined in section 3.4.
- (d) The candidate must have obtained either (i) or (ii). Students with a teaching area in Art and/or Music should also refer to paragraph two under the heading "8.2 Program" below.
  - (i) a grade point average of at least 4.00 (UVic B-) on the upper level courses of each of the two teaching areas, including prerequisites and corequisites (NOTE: where fewer than 9 units of upper level work has been completed in any one area, the grade point average will be calculated on the upper level courses plus one or more of the 200 level courses in that area, to a total of 9 units); or
  - (ii) a grade point average of at least 4.00 (UVic B-) in the upper level courses of any single expanded teaching area (NOTE: where fewer than 18 units of upper level work has been completed in the area, the calculation will include area courses at the 200 level

to total 18 units) and if the area is physical education expanded, or music expanded, a grade point average of at least 4.00 is required on the 7½ units of other area work.

- (e) A grade point average of at least 3.00 (UVic C+) must have been obtained on
  - (i) the most recently completed session; and
  - (ii) the most recent two years of at least 30 units.

Normally all of the above requirements must be complete by April 30 of the year in which an applicant wishes to begin the professional year. Any applicants unable to meet this deadline who wish to complete course requirements during the summer session must appeal to the Faculty Appeals and Adjudication Committee, c/o the Education Advising Centre, indicating why they believe their circumstances to be unusual, and requesting permission to be considered for admission on the basis of the results of their work during the summer period. The Committee will not accept work completed during the summer to raise a deficient grade point average, but may accept courses taken to meet requirements when the grade point average is already sufficient.

Applicants for the professional year should be aware that the Faculty of Education has maximum enrollment limits and that therefore all qualified applicants are not guaranteed acceptance. Applicants will be notified regarding their admissibility as soon as possible.

Attendance is required on September 5, 1995 and from that date on.

### 8.2 PROGRAM

This is a five year program leading to a Bachelor of Education (Secondary Curriculum) degree and professional teacher certification. The program is available only to students accepted in the teaching areas of Art, Music, and Physical Education. Each of these areas has a limited quota and there are specific prerequisites, including an interview, for admission to each. Those who wish to teach other subjects should obtain preparation through an academic program in another faculty and apply for the Post Degree Professional Program as described in 9.0.

Art and Music may be taken either as expanded areas or in combination with another approved area. The cases of students who do not maintain a 5.00 grade point average in upper level Art, Music, Art Education and Music Education courses will be reviewed by the Department of Arts in Education. Such students may be given a trial period to reach a specified GPA in art or music, and, if unsuccessful, be required to withdraw from the teaching area. In addition, due to quotas, students who do not enter professional year in their assigned year and students required to withdraw will have to apply for readmission under the prevailing admission requirements at the time of their re-application.

Physical Education must be taken with another approved area.

The course requirements for these areas are shown below.

The first four years of the program are mainly concerned with academic preparation in the teaching subjects while the fifth year contains the professional preparation for teaching these subjects in the secondary schools.

Attendance at five winter sessions is normally required. It is possible to transfer courses taken from B.C. regional colleges or elsewhere if they are equivalent to program requirements. It is suggested that advice be obtained from the Education Advising Centre to ensure that courses taken will carry credit to any particular program.

Year Five is the professional year in which students spend an extended time in the schools and take courses on campus that are directly related to their professional training. In order to gain admission to the professional year, it is necessary to meet the requirements as specified in section 8.1.2 above entitled **Professional Year Admission**. Normally all courses listed for this year are taken as a coordinated program during one full winter session. Attendance at all orientation sessions, field activities and classes is expected. Because of the professional involvement off campus during this year, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre.

On completion of the program students may apply for graduation and teacher certification.



### 8.3 COURSE REQUIREMENTS

The minimum degree requirement is successful completion of the following:

|  |                 |
|--|-----------------|
| Required Education courses .....   | 21 to 23 units  |
| Required Arts and Science and Fine Arts courses .....                        | 6 units         |
| Teaching area(s) courses<br>(including prerequisites and corequisites) ..... | 37½ units       |
| Electives .....  | up to 9 units   |
| <b>TOTAL</b> .....   | <b>75 units</b> |

### 8.4 YEARS ONE TO FOUR

Students admitted to the art expanded area or the music expanded area will include the courses listed below in the first four years of their program. Students admitted to the art area, the music (choral or instrumental) area, or the physical education area should obtain advice regarding second teaching areas from the Education Advising Centre.

#### ART

##### General Program Requirements:

|   |            |
|---|------------|
| ENGL 115/116 or 121/122 or 150/151 .....  | 3          |
| ED-D 401 .....  | 1½         |
| ED-D 406 .....  | 3          |
| ED-P 398 .....  | 1½         |
| ED-P 498 .....  | 1½         |
| THEA 150 or approved elective from a Faculty<br>other than the Faculty of Education ..... | 1½         |
| Elective(s) approved by Educating Advising ....   | 1½         |
| <b>Total</b> .....  | <b>13½</b> |

##### Corequisite:

|   |   |
|---|---|
| ENGL 200, 201, 202, 203, 250, or HA 120 ..... | 3 |
|---|---|

##### Area:

|  |           |
|--|-----------|
| AE 103 .....   | 3         |
| AE 200 .....   | 1½        |
| AE 201 .....   | 1½        |
| AE 303 or 309 .....  | 3 or 1½   |
| AE 315 .....   | 1½        |
| AE 316 or 317 .....  | 1½        |
| AE 401 .....   | 3         |
| Courses chosen from: AE 205, 208, 305, 306,<br>307, 308, 310, 316, 317, 319, any 402 ... | 3 or 4½   |
| <b>Total</b> .....   | <b>18</b> |

##### Option 1 — Expanded Art

|  |            |
|--|------------|
| Approved Art Education .....                     | 7½         |
| Approved upper level art or History in Art ..... | 9          |
| Electives .....                                  | 9          |
| <b>Total</b> .....                               | <b>25½</b> |

or

##### Option 2 — Second Teaching Area:

|  |           |
|--|-----------|
| Approved second teaching area plus electives ..... | 25½       |
| <b>Total units</b> .....                           | <b>60</b> |

Upper level visual arts courses may be substituted in the area with the approval of the Art Adviser.

Up to 3 units of additional work may be required if a student's background is considered to be inadequate for teaching art in the public school system.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisites. Students should consult with the Art Adviser.

#### MUSIC (CHORAL)

##### General Program Requirements:

|   |            |
|---|------------|
| ENGL 115/116 or 121/122 or 150/151 .....  | 3          |
| ED-D 401 .....  | 1½         |
| ED-D 406 .....  | 3          |
| ED-P 398 .....  | 1½         |
| ED-P 498 .....  | 1½         |
| THEA 150 or approved elective from a Faculty<br>other than the Faculty of Education ..... | 1½         |
| Elective(s) approved by Education Advising ....   | 1½         |
| <b>Total</b> .....  | <b>13½</b> |

##### Area:

|  |              |
|--|--------------|
| ME 101 .....   | 1½           |
| ME 201 .....   | 1½           |
| ME 216 .....   | 2            |
| ME 301 .....   | 1½           |
| ME 303A or 308 .....   | 1½           |
| ME 401 .....   | 1½           |
| ME 402 .....   | 1½           |
| MUS 101A, 101B, 170 .....  | 3            |
| MUS 110 .....  | 3            |
| MUS 356 .....  | 3            |
| Two of MUS 180, 280, 380, 480<br>ME 118, 218, 318, 418<br>ME 120, 220, 320, 420<br>ME 121, 221, 321, 421 ..... | 2-3          |
| <b>Total</b> .....   | <b>22-23</b> |

Approved second teaching area plus electives .....

**Total units** .....

Students may substitute an elective for one of ED-P 398 or 498.

#### MUSIC (INSTRUMENTAL)

##### General Program Requirements:

|   |            |
|---|------------|
| ENGL 115/116 or 121/122 or 150/151 .....  | 3          |
| ED-D 401 .....  | 1½         |
| ED-D 406 .....  | 3          |
| ED-P 398 .....  | 1½         |
| ED-P 498 .....  | 1½         |
| THEA 150 or approved elective from a Faculty<br>other than the Faculty of Education ..... | 1½         |
| Elective(s) approved by Education Advising ....   | 1½         |
| <b>Total</b> .....  | <b>13½</b> |

##### Area:

|  |                |
|--|----------------|
| ME 101 .....   | 1½             |
| ME 201 .....   | 1½             |
| ME 216 .....   | 2              |
| ME 301 .....   | 1½             |
| ME 316 .....   | 1              |
| ME 401 .....   | 1½             |
| ME 402 .....   | 1½             |
| MUS 101A, 101B, 170 .....  | 3              |
| Two of MUS 331, 332, 333 .....   | 3              |
| MUS 356 .....  | 3              |
| Two of MUS 180, 280, 380, 480<br>ME 118, 218, 318, 418<br>ME 120, 220, 320, 420<br>ME 121, 221, 321, 421 ..... | 2-3            |
| <b>Total</b> .....   | <b>21½-22½</b> |

Approved second teaching area plus electives .....

**Total units** .....

Students may substitute an elective for one of ED-P 398 or 498.

#### MUSIC (EXPANDED)

##### General Program Requirements:

|   |            |
|---|------------|
| ENGL 115/116 or 121/122 or 150/151 .....  | 3          |
| ED-D 401 .....  | 1½         |
| ED-D 406 .....  | 3          |
| ED-P 398 .....  | 1½         |
| ED-P 498 .....  | 1½         |
| THEA 150 or approved elective from a Faculty<br>other than the Faculty of Education ..... | 1½         |
| Elective(s) approved by Education Advising ....   | 1½         |
| <b>Total</b> .....  | <b>13½</b> |



|                               |                  |
|-------------------------------|------------------|
| Area:                         |                  |
| ME 101 .....                  | 1½               |
| ME 120 or 121 .....           | 1                |
| ME 201 .....                  | 1½               |
| ME 216 .....                  | 2                |
| ME 301 .....                  | 1½               |
| ME 316 .....                  | 1                |
| ME 319 .....                  | 1½               |
| ME 401 .....                  | 1½               |
| ME 402 .....                  | 1½               |
| MUS 101A, 101B, 170 .....     | 3                |
| MUS 110 .....                 | 3                |
| MUS 201 .....                 | 2                |
| MUS 270 .....                 | 1                |
| MUS 331 .....                 | 1½               |
| MUS 332 .....                 | 1½               |
| MUS 333 .....                 | 1½               |
| MUS 356 .....                 | 3                |
| Two of MUS 180, 280, 380, 480 |                  |
| ME 118, 218, 318, 418         |                  |
| ME 120, 220, 320, 420         |                  |
| ME 121, 221, 321, 421 .....   | 2-3 .....31½-32½ |

Courses chosen from an approved second teaching area ..... 7½

Electives ..... 6½-7½

Total units ..... 60

Students may substitute an elective for one of ED-P 398 or 498.

As noted above, students choosing the expanded teaching area in music education will be required to take at least 7½ units, chosen from one other teaching area with a grade point average of 4.00 (UVic B-).

## PHYSICAL EDUCATION

General Program Requirements:

|   |             |
|---|-------------|
| ENGL 115/116 or 121/122 or 150/151 .....        | 3           |
| ED-D 401 .....                                  | 1½          |
| ED-D 406 .....                                  | 3           |
| ED-P 498 .....                                  | 1½          |
| THEA 150 or approved elective from a Faculty    |             |
| other than the Faculty of Education .....       | 1½          |
| Elective(s) approved by Education Advising .... | 1½ ..... 12 |

|   |             |
|---|-------------|
| Area:                                     |             |
| PE 106, 107, 115, 120 and 122 .....       | 2½          |
| One of PE 109 or 114 or 119 .....         | ½           |
| One of PE 116 or 117 .....                | ½           |
| One of PE 121 or 123 or 124 or 125 .....  | ½           |
| One course from PE 105-125* .....         | ½           |
| PE 141 .....                              | 1½          |
| PE 143 .....                              | 1½          |
| PE 144 .....                              | 1½          |
| PE 241B .....                             | 1½          |
| PE 245 .....                              | 1½          |
| PE 341 .....                              | 1½          |
| PE 344 .....                              | 1½          |
| PE 346 .....                              | 1½          |
| PE 352 .....                              | 1½          |
| PE 360 .....                              | 1½          |
| PE 361 .....                              | 1½          |
| PE 443 .....                              | 1½          |
| PE 452 .....                              | 1½          |
| Three of PE 461 A-M .....                 | 1½          |
| One of PE 342, 347, 348, 441 or 445 ..... | 1½ ..... 27 |

Approved second teaching area plus electives ..... 21

\*Students must possess their Bronze Medallion Certificate or take PE 105.

Total units ..... 60

## TEACHING AREAS (SECONDARY)

### ART

Restricted admission; see 8.1.1.

Corequisite:

|   |           |
|---|-----------|
| ENGL 200, 201, 202, 203, 250, or HA 120 ..... | 3 ..... 3 |
|---|-----------|

Area:

|                     |         |
|---------------------|---------|
| AE 103 .....        | 3       |
| AE 200 .....        | 1½      |
| AE 201 .....        | 1½      |
| AE 303 or 309 ..... | 3 or 1½ |
| AE 315 .....        | 1½      |
| AE 316 or 317 ..... | 1½      |
| AE 401 .....        | 3       |

Courses chosen from:

|                                   |                  |
|-----------------------------------|------------------|
| AE 205, 208, 305, 306, 307, 308,  |                  |
| 310, 316, 317, 319, any 402 ..... | 3 or 4½ ..... 18 |

Upper level visual arts courses may be substituted in the area with the approval of the Art Adviser.

Up to 3 units of additional work may be required if a student's background is considered to be inadequate for teaching art in the public school system.

Not all art education courses can be offered each year. Students may complete courses in a sequence of their own choice since there are no prerequisites. Students should consult with the Art Adviser.

### BIOLOGICAL SCIENCES

Corequisites:

|                                       |             |
|---------------------------------------|-------------|
| CHEM 101 or 140* .....                | 1½          |
| CHEM 102 .....                        | 1½          |
| 1 of CHEM 222, 231, 232 .....         | 1½          |
| MATH 100 or other approved math ..... | 1½          |
| STAT 255 .....                        | 1½ ..... 7½ |

Area:

|                                    |             |
|------------------------------------|-------------|
| BIOC 200 .....                     | 1½          |
| BIOL 210 .....                     | 1½          |
| BIOL 215 .....                     | 3           |
| BIOL 220 .....                     | 1½          |
| BIOL 225 .....                     | 1½          |
| BIOL 230 .....                     | 1½          |
| BIOL 361 .....                     | 1½          |
| BIOL 365 .....                     | 1½          |
| BIOL 366 .....                     | 1½          |
| Approved upper level biology ..... | 1½ ..... 15 |

\* CHEM 140 has MATH 100 as a co- or prerequisite. A B grade is required in CHEM 140.

It is assumed that all applicants for this area will have completed BIOL 11 and 12; if not, BIOL 150A and B must be taken in addition to the above.

### CHEMISTRY

Corequisites:

|                |            |
|----------------|------------|
| MATH 100 ..... | 1½         |
| MATH 101 ..... | 1½ ..... 3 |

Area:

|   |                  |
|---|------------------|
| CHEM 101 or 140 .....                   | 1½               |
| CHEM 102 or 245 .....                   | 1½               |
| CHEM 213 .....                          | 1½               |
| CHEM 222 .....                          | 1½               |
| CHEM 231 .....                          | 1½               |
| CHEM 235 .....                          | 1½               |
| CHEM 245 (if not completed above) ..... | 1½ or 0          |
| Approved chemistry courses* .....       | 4½ or 6 ..... 15 |

\* MATH 200 is prerequisite to some upper level courses.



**ENGLISH**

## Corequisites:

|                |          |
|----------------|----------|
| ED-B 350 ..... | 3        |
| LING 388 ..... | 1½ ..... |
|                | 4½       |

## Area:

|   |         |
|---|---------|
| ED-B 371 .....  | 3       |
| ENGL 200* .....   | 3       |
| ENGL 215 .....  | 1½      |
| ENGL 400 .....  | 1½      |
| ENGL 366 .....  | 3       |
| 3 units from ENGL 457, 450, 451,<br>452, 453 .....      | 3       |
| 3 units from ENGL 429, 431, 432,<br>434, 436, 437 ..... | 3 ..... |
|   | 18      |

\*If ENGL 150 and 151 are complete, the student will choose from ENGL 201, 202, 203 or an upper level course in English.

**FRENCH**

## Area:

|                          |         |
|--------------------------|---------|
| FREN 181 and 182 .....   | 3       |
| FREN 220 .....           | 1½      |
| FREN 286 .....           | 1½      |
| FREN 287 .....           | 1½      |
| FREN 291 .....           | 1½      |
| FREN 292 .....           | 1½      |
| FREN 302 .....           | 3       |
| FREN 350 .....           | 1½      |
| FREN 300 or higher ..... | 3 ..... |
|                          | 18      |

FREN 402 is recommended.

Students should note that an oral competency examination in French is required before admission to the professional year. This exam must be completed to the satisfaction of the Faculty of Education, or admission to professional year will be denied.

**GEOGRAPHY**

## Corequisites:

|  |         |
|--|---------|
| HIST 130 .....   | 3       |
| 3 units from HIST 105, 240, 250, 253, 255,<br>376, 390 ..... | 3 ..... |
|  | 6       |

## Area:

|  |          |
|--|----------|
| GEOG 101A and 101B .....   | 3        |
| GEOG 202 .....   | 1½       |
| GEOG 211, 213, or 214 .....  | 1½       |
| GEOG 215 .....   | 1½       |
| GEOG 362 (formerly 361A/B) .....                                     | 1½       |
| GEOG 321, 322, 323, or 328 .....                                     | 1½       |
| GEOG 340A, 340B, or 350A .....                                       | 1½       |
| 4½ units from GEOG 343, 347B, 348,<br>464A, 464B 465, 466, 467 ..... | 4½ ..... |
|  | 16½      |

**GERMAN**

## Corequisite:

|  |         |
|--|---------|
| Literature course at the 200<br>level or higher in any language<br>other than German ..... | 3 ..... |
|  | 3       |

## Area:

|                               |         |
|-------------------------------|---------|
| GER 100 and 200, or 149 ..... | 6       |
| GER 254 .....                 | 1½      |
| GER 260 .....                 | 1½      |
| GER 300 .....                 | 3       |
| GER 400 or higher .....       | 3 ..... |
|                               | 15      |

Students should note that an oral competency examination in German is required before admission to the professional year. This exam must be completed to the satisfaction of the Faculty of Education, or admission to professional year will be denied.

**HISTORY**

## Corequisites:

|                            |         |
|----------------------------|---------|
| ENGL 200, 201 or 202 ..... | 3       |
| GEOG 101A and 101B .....   | 3 ..... |
|                            | 6       |

## Area:

|  |         |
|--|---------|
| POLI 100 .....   | 3       |
| Canadian History .....                                 | 3       |
| Modern European or contemporary<br>world history ..... | 3       |
| Approved history electives .....                       | 6 ..... |
|  | 15      |

History courses chosen to complete this area must include at least 3 units lower level and at least 9 units upper level.

**HISTORY/HISTORY IN ART**

## Corequisites:

|                          |         |
|--------------------------|---------|
| GEOG 101A and 101B ..... | 3 ..... |
|                          | 3       |

## Area:

|  |           |
|--|-----------|
| Canadian History .....                                 | 3         |
| Modern European or contemporary<br>world history ..... | 3         |
| Approved history electives .....                       | 3-6       |
| HA 120 .....   | 3         |
| History in Art electives .....                         | 6-9 ..... |
|  | 21        |

At least 3 units of courses chosen in history must be upper level.

**MATHEMATICS**

## Area:

|                                |         |
|--------------------------------|---------|
| MATH 100 .....                 | 1½      |
| MATH 101 .....                 | 1½      |
| MATH 233A .....                | 1½      |
| MATH 233C or MATH 410 .....    | 1½      |
| MATH 362 .....                 | 1½      |
| MATH 368A .....                | 1½      |
| STAT 260 .....                 | 1½      |
| STAT 261 .....                 | 1½      |
| Two of CSC 110, 115, 212 ..... | 3 ..... |
|                                | 15      |

In addition to the 15 units listed above, MATH 333A and 333C are recommended.

**MUSIC (CHORAL)**

Restricted admission; see 8.1.1.

## Area:

|  |           |
|--|-----------|
| ME 101 .....   | 1½        |
| ME 201 .....   | 1½        |
| ME 216 .....   | 2         |
| ME 301 .....   | 1½        |
| ME 303A or 308 .....   | 1½        |
| ME 401 .....   | 1½        |
| ME 402 .....   | 1½        |
| MUS 101A, 101B, 170 .....  | 3         |
| MUS 110 .....  | 3         |
| MUS 356 .....  | 3         |
| Two of MUS 180, 280, 380, 480<br>ME 118, 218, 318, 418<br>ME 120, 220, 320, 420<br>ME 121, 221, 321, 421 ..... | 2-3 ..... |
|  | 22-23     |

Students may substitute an elective for one of ED-P 398 or 498.



**MUSIC (INSTRUMENTAL)**

Restricted admission; see 8.1.1.

|                                |                  |
|--------------------------------|------------------|
| Area:                          |                  |
| ME 101 .....                   | 1½               |
| ME 201 .....                   | 1½               |
| ME 216 .....                   | 2                |
| ME 301 .....                   | 1½               |
| ME 316 .....                   | 1                |
| ME 401 .....                   | 1½               |
| ME 402 .....                   | 1½               |
| MUS 101A, 101B, 170 .....      | 3                |
| Two of MUS 331, 332, 333 ..... | 3                |
| MUS 356 .....                  | 3                |
| Two of MUS 180, 280, 380, 480  |                  |
| ME 118, 218, 318, 418          |                  |
| ME 120, 220, 320, 420          |                  |
| ME 121, 221, 321, 421 .....    | 2-3 .....21½-22½ |

Students may substitute an elective for one of ED-P 398 or 498.

**PHYSICAL EDUCATION**

Restricted admission; see 8.1.1.

|   |            |
|---|------------|
| Area:                                     |            |
| PE 106, 107, 115, 120 and 122 .....       | 2½         |
| One of PE 109 or 114 or 119 .....         | ½          |
| One of PE 116 or 117 .....                | ½          |
| One of PE 121 or 123 or 124 or 125 .....  | ½          |
| One course from PE 105-125* .....         | ½          |
| PE 141 .....                              | 1½         |
| PE 143 .....                              | 1½         |
| PE 144 .....                              | 1½         |
| PE 241B .....                             | 1½         |
| PE 245 .....                              | 1½         |
| PE 341 .....                              | 1½         |
| PE 344 .....                              | 1½         |
| PE 346 .....                              | 1½         |
| PE 352 .....                              | 1½         |
| PE 360 .....                              | 1½         |
| PE 361 .....                              | 1½         |
| PE 443 .....                              | 1½         |
| PE 452 .....                              | 1½         |
| Three of PE 461 A-M .....                 | 1½         |
| One of PE 342, 347, 348, 441 or 445 ..... | 1½ .....27 |

\*Students must possess their Bronze Medallion Certificate or take PE 105.

**PHYSICS**

|                        |          |
|------------------------|----------|
| Corequisites:          |          |
| MATH 100 and 101 ..... | 3        |
| MATH 200 and 201 ..... | 3 .....6 |

|                            |                 |
|----------------------------|-----------------|
| Area:                      |                 |
| PHYS 112 or 120, 214, 215, |                 |
| 216, 220, 317, 325 .....   | 10½ or 12       |
| Approved Physics .....     | 4½ or 3 .....15 |

Students are urged to seek advice from the Secondary Science Adviser.

**THEATRE/DRAMA IN EDUCATION**

|                               |          |
|-------------------------------|----------|
| Corequisites:                 |          |
| ENGL 402 or 403 and ED-B 360; |          |
| or ED-B 371 .....             | 3 .....3 |

|                |           |
|----------------|-----------|
| Area:          |           |
| THEA 105 ..... | 3         |
| THEA 110 ..... | 3         |
| THEA 181 ..... | 3         |
| THEA 330 ..... | 3         |
| THEA 482 ..... | 3 .....15 |

**8.5 YEAR FIVE: PROFESSIONAL YEAR**

September to December

|                                 |    |
|---------------------------------|----|
| ED-B 344 (formerly 343C) .....  | 1½ |
| ED-B 420, 423, 425 or 427 ..... | 3  |
| One of:                         |    |

|                                 |    |
|---------------------------------|----|
| (a) <b>Art Education</b>        |    |
| ED-A 750 .....                  | 1½ |
| ED-D 337A .....                 | 1½ |
| Approved second area curriculum |    |
| and instruction course or       |    |
| ED-D 404 or approved            |    |
| Education elective .....        | 1½ |

|                                 |    |
|---------------------------------|----|
| (b) <b>Music Education</b>      |    |
| ED-A 762 .....                  | 1½ |
| ED-D 337A .....                 | 1½ |
| Approved second area curriculum |    |
| and instruction course or       |    |
| ED-D 404 or approved            |    |
| Education elective .....        | 1½ |

|                                 |    |
|---------------------------------|----|
| (c) <b>Physical Education</b>   |    |
| ED-C 764 .....                  | 1½ |
| ED-D 337C .....                 | 1½ |
| Approved second area curriculum |    |
| and instruction course .....    | 1½ |

January to April

|                |    |
|----------------|----|
| ED-B 430 ..... | 1½ |
| ED-P 780 ..... | 1½ |
| ED-P 798 ..... | 3  |

Total units .....15

Total Units for Degree .....75

Eligible for PROFESSIONAL CERTIFICATE and DEGREE

**9.0 BACHELOR OF EDUCATION  
POST DEGREE PROFESSIONAL PROGRAM  
— SECONDARY****9.1 ADMISSION**

Maximum enrollments have been established; therefore the Faculty cannot guarantee that all qualified candidates will be accepted. Accepted candidates will be notified as early as possible.

The deadline for receipt of application forms is January 31. A special set of application forms is required and may be obtained by writing to the Education Advising Centre after the 1st of October. Please note that application and evaluation fees, as well as all supporting transcripts, courses in progress forms and school experience forms, are required to be submitted with the special application form by January 31. Transcripts showing completion of work in progress during the January to April period and, where applicable, the degree, must be received by May 31.

There is a quota on each of the teaching subject areas of this program. Individual interviews may be required as deemed appropriate by the Faculty.

Applications will be considered from those who meet the following requirements:

- a degree acceptable in content to the Faculty Appeals and Adjudication Committee, from a recognized university; and
- a grade point average of at least 3.00 (UVic C+) on the most recent session and on the most recent two years (30 units) (ie to December 31); and
- credit for 3 units of approved English; and
- demonstration of written English competency; for full information see section 3.4; and
- academic preparation in two teaching concentrations or in one teaching major chosen from the following list:

CONCENTRATION: Minimum 9 units (18 semester hours) of approved upper level credit with a minimum B- average (UVic 4.00). Teaching concentrations in Physical Education, Theatre and German cannot be taken in combination and must be taken with another approved concentration.



MAJOR: minimum 15 units (30 semester hours) of approved upper level credit with a minimum B- average (UVic 4.00). Physical Education, Theatre and German are not available as teaching majors.

- (i) **Art:** degrees with a concentration or major in visual arts must have their content approved in advance by the Faculty Adviser.
- (ii) **Biology, Chemistry, or Physics:** degrees with a concentration or major in any of these sciences, must have their content approved in advance by the Faculty Adviser.
- (iii) **English:** whether presenting a concentration or major, the following courses or their equivalents must be included: ENGL 366; 3 units from ENGL 457, 450, 451, 452, 453; 3 units from ENGL 429, 431, 432, 434, 436, 437; ED-B 350; ED-B 371.
- (iv) **French:** degrees with a concentration or major. Applicant must pass an oral competency exam.
- (v) **Geography:** whether presenting a concentration or major, the following courses or their equivalents must be included: HIST 130; 3 units from HIST 105, 240, 250, 253, 255, 376, 390; GEOG 101A, 101B, 202, 215, 362; one of GEOG 211, 213, 214; one of GEOG 321, 322, 323, 328; one of GEOG 340A, 340B, 350A; 4 1/2 units from GEOG 343, 347B, 348, 464A, 464B, 465, 466, 467.
- (vi) **History:** whether a concentration or major, 3 units of Canadian History and 3 units of approved introductory geography must be included.
- (vii) **Mathematics:** a concentration or major. In lieu of the concentration, the 15 unit mathematics teaching area as outlined on page 184 of this Calendar is acceptable.
- (viii) **Music:** requires a University of Victoria Bachelor of Music with Major in Music Education (Secondary) or an equivalent degree from another institution.
- (ix) One of:  
**Physical Education:** all the specific Physical Education courses or their equivalents as outlined under *Physical Education* on page 185 of this Calendar must be presented.  
**Theatre:** degrees with a concentration in Theatre must have THEA 482 and 330 or their equivalents and have their content approved in advance by the Faculty Adviser.  
**German:** minimum 9 upper level units. Applicants must pass an oral competency exam.
- (x) **Other subject areas** normally taught in B.C. Secondary Schools may be acceptable subject to the approval of the Dean.

Students of exceptional ability who do not meet the stated admission requirements may appeal to the Faculty Appeals and Adjudication Committee for consideration. "Exceptional" may be considered in terms of high grade point average, relevant work experience or unique academic qualifications.

## 9.2 PROGRAM

This is a program for applicants with an approved degree. The first year, normally ten months, prepares students for a teaching certificate. Additional course work as described under 9.3.2, Degree Completion, will result in the granting of the degree Bachelor of Education. A minimum of 30 units is required for the degree.

Because of the professional involvement off campus during this year, students are not normally permitted to take courses in addition to those specified. Any exceptions must have approval from the Education Advising Centre.

Successful completion of the practicum course ED-P 798 and a grade point average of at least 3.00 on all courses of the program, are necessary to qualify for certification.

The Regular Program begins on Tuesday, July 4, 1995 and concludes at the end of April, 1996. The Special Music Program begins Wednesday, September 6, 1995 and concludes at the end of April, 1996.

## 9.3 COURSE REQUIREMENTS

### 9.3.1

#### (a) Regular Program

##### July-August

|   |       |
|---|-------|
| ED-D 401.....                                       | 1 1/2 |
| ED-D 406 or one of<br>ED-B 420, 423, 425, 427 ..... | 3     |
| ED-P 790 .....                                      | 1 1/2 |

##### September-December

|   |         |
|---|---------|
| <sup>1</sup> ED-A 750 to ED-E 769 .....             | 1 1/2-3 |
| ED-B 344 .....                                      | 1 1/2   |
| ED-D 337A, B, C or E .....                          | 1 1/2   |
| ED-D 406 or one of ED-B 420,<br>423, 425, 427 ..... | 3       |

##### January-April

|                |       |
|----------------|-------|
| ED-B 430 ..... | 1 1/2 |
| ED-P 780 ..... | 1 1/2 |
| ED-P 798 ..... | 3     |

Total units..... 19 1/2-21

Eligible for CERTIFICATION

#### (b) Special Music Program

##### September-December

|                               |       |
|-------------------------------|-------|
| ED-A 762.....                 | 1 1/2 |
| ED-B 344 .....                | 1 1/2 |
| ED-B 420, 423, 425, 427 ..... | 3     |
| ED-D 337A .....               | 1 1/2 |

Approved second area curriculum  
and instruction course or ED-D 404  
or approved Education elective .....

|                |       |
|----------------|-------|
| January-April  |       |
| ED-B 430 ..... | 1 1/2 |
| ED-P 780 ..... | 1 1/2 |
| ED-P 798 ..... | 3     |

Total units..... 15

Eligible for CERTIFICATION

### Notes:

<sup>1</sup> Students admitted with one area will take one course for 1 1/2 units; students admitted with two areas will take two courses for a total of 3 units.

### 9.3.2 Degree Completion

For students who completed the certification component up to and including 1994-95, an additional 12 to 15 units of approved course work is required for the degree. All courses must be selected in consultation with the Education Advising Centre to ensure that they support the teaching areas or are used to complete a second teaching area if appropriate.

For students completing the certification component 1995-96, and thereafter, an additional 10 1/2 to 15 units of approved course work, including ED-D 404 unless already completed, is required for the degree.

All students completing the Bachelor of Education degree must have a total of at least 30 units of course work completed beyond their first degree and a grade point average of 3.00 in order to qualify for graduation.

## 10.0 BACHELOR OF ARTS

### 10.1 B.A. HONOURS AND MAJOR IN KINESIOLOGY

The School of Physical Education offers Major and Honours programs in the area of Kinesiology. The Major program requires a degree of specialization in the last two years and may permit the student to proceed to graduate study or to a professional position in the various fields associated with Kinesiology. The Honours program is recommended for students planning graduate work in any of the sub-disciplines in Kinesiology. Students who select their electives appropriately may also qualify to enter an education post degree professional program for a teaching career.



**Major**

The School of Physical Education each year will accept approximately fifteen students in the B.A. Kinesiology Major program. The deadline for receipt of application forms is January 31. A special set of application forms is required and may be obtained by writing to the School of Physical Education after the 1st of November. Applications will be considered from those who meet the following:

- (a) the general Faculty admission requirements specified in 3.1
- (b) interview by the School of Physical Education
- (c) academic preparation which includes the following:
  - grade point average of 4.00 (on 9 pt scale)
  - PE 143 with a minimum grade of B (5 pt on 9 pt scale)

In order to continue in this program a grade point average of at least 3.00 is required in every session attended.

**Honours**

It is recommended that students in the Kinesiology Major program seeking an Honours degree apply to the Honours Adviser of the School before the start of the third year of the program. Applicants require a minimum of 6.00 grade point average in all physical education courses (excluding PE 100 level courses) and a grade point average of 3.50 in non-physical education courses. If accepted, honours students are responsible for finding a supervisor for their honours thesis. All requirements should be completed within five academic years. The completed thesis will be examined by a three person committee including the supervisor. To graduate with an honours degree, a student must have a minimum 3.50 grade point average for all work outside the School. An Honours degree will be awarded to students who obtain:

- (1) a graduating average of at least 3.50
- (2) a grade point average of at least 5.50 for 300 and 400 level School of Physical Education courses
- (3) a grade of at least B- in PE 499.

An Honours degree with distinction will be awarded to students who obtain:

- (1) a graduating average of at least 6.50
- (2) a grade point average of at least 6.50 for 300 and 400 level School of Physical Education courses
- (3) a grade of at least A- in PE 499.

A student who achieves a grade lower than B- in PE 499 will graduate under the Major program providing all other requirements for the degree are fulfilled. The submission date for the thesis in PE 499 is the last day of classes.

**KINESIOLOGY PROGRAMS****Recommended Sequence of Courses****B.A. Honours****Year One: (Arts and Science)**

|  |    |
|--|----|
| ENGL 115/116 or 121/122<br>or 150/151..... | 3  |
| PE 115 plus two of                         |    |
| PE 104-132 .....                           | 1½ |
| PE 141 .....                               | 1½ |
| PE 143 .....                               | 1½ |
| PSYC 100A and B .....                      | 3  |
| SOCI 100 .....                             | 1½ |
| Electives .....                            | 4½ |

**Year Two:**

|                                     |    |
|-------------------------------------|----|
| Five of PE 104-132/<br>461A-M ..... | 2½ |
| PE 241A .....                       | 1½ |
| PE 241B .....                       | 1½ |
| PE 243 .....                        | 1½ |
| PE 253 .....                        | 1½ |
| PSYC 331 .....                      | 3  |
| Electives .....                     | 4½ |

**B.A. Major****Year One: (Arts and Science)**

|   |    |
|---|----|
| ENGL 115/116 or 121/122<br>or 150/151 ..... | 3  |
| PE 115 plus two of                          |    |
| PE 104-132 .....                            | 1½ |
| PE 141 .....                                | 1½ |
| PE 143 .....                                | 1½ |
| PSYC 100A and B .....                       | 3  |
| SOCI 100 .....                              | 1½ |
| Electives .....                             | 4½ |

**Year Two:**

|                                     |    |
|-------------------------------------|----|
| Five of PE 104-132/<br>461A-M ..... | 2½ |
| PE 241A .....                       | 1½ |
| PE 241B .....                       | 1½ |
| PE 243 .....                        | 1½ |
| PE 253 .....                        | 1½ |
| PSYC 331 .....                      | 3  |
| Electives .....                     | 4½ |

**Years Three and Four:**

|                                     |    |
|-------------------------------------|----|
| Four of PE 104-132/<br>461A-M ..... | 2  |
| PE 342 .....                        | 1½ |
| PE 346 .....                        | 1½ |
| PE 347 .....                        | 1½ |
| PE 348 .....                        | 1½ |
| PE 442 .....                        | 1½ |
| PE 443 or 354A .....                | 1½ |
| PE 444 .....                        | 1½ |
| PE 445 .....                        | 1½ |
| PE 447 .....                        | 1½ |
| Approved statistics course ..       | 1½ |
| Upper level psychology .....        | 3  |
| Upper level sociology .....         | 3  |
| PE 460 .....                        | 1  |
| PE 499 .....                        | 3  |
| Electives .....                     | 7½ |

**Total Units** .....67 .....66

**NOTES (Honours and Major):**

- (a) Students must complete 6 units of skill performance and analysis courses which must include PE 105, PE 115, and at least two from the PE 461 series. PE 470 may be substituted for the two PE 461's at a loss of ½ a unit.
- (b) Nine units of electives must be from the Faculty of Arts and Science and at least 6 of these must be at the 300 or 400 level.
- (c) Of the elective units not required in the Faculty of Arts and Science, no more than 6 units of these may be from the School of Physical Education.
- (d) Students should consult with the Kinesiology Faculty Adviser regarding the areas from which the electives should be chosen.
- (e) Honours students are advised to complete both an approved statistics course and PE 460 before entering into the final year of their program.
- (f) Students must complete PE 143 with a minimum grade of B before being considered for entry into the School of Physical Education.

## 10.2 B.A. MAJOR IN LEISURE SERVICE ADMINISTRATION — COOPERATIVE EDUCATION PROGRAM

The Leisure Service Administration program prepares students to enter the field of Recreational Administration and provides preparation in the planning, implementation and supervision of programs in a wide range of recreation settings.

The Leisure Service Administration program is available only on a cooperative model basis. Please refer to page 38 for a general description of the Cooperative Education concept and general regulations governing all cooperative education students.

The School of Physical Education each year will accept approximately fifteen students into the B.A. Leisure Service Administration Major program. The deadline for receipt of application forms is January 31. A special set of application forms is required and may be obtained by writing to the School of Physical Education after the 1st of November. Applications will be considered from those who meet the following:

- (a) the general Faculty admission requirements specified in 3.1
- (b) interview by the School of Physical Education
- (c) academic preparation which includes the following:
  - grade point average of 4.00 (on 9 pt scale)
  - PE 143 with a minimum grade of B (5 pt on 9 pt scale)

In order to continue in this program a grade point average of at least 3.50 is required in every session attended.

Students must complete four Work Terms (each a minimum duration of 13 weeks). Each Work Term is noted on the student's academic record (grading: COM, N or F). A student who does not complete a Work Term satisfactorily will normally be required to withdraw from the program but the Leisure Service Administration Committee may, upon review, authorize a further Work Term. The performance of students in the Leisure Service Administration Cooperative Program will be reviewed



after each campus term and each Work Term. Students whose performance is deemed unsatisfactory by the Leisure Service Administration Committee will be so informed and will be advised by the Committee of the conditions they are to satisfy in order to remain in the program.

#### Year One: (Arts and Science)

|  |     |
|--|-----|
| C SC 100, 110, or 212 .....              | 1½  |
| ENGL 115/116 or 121/122 or 150/151 ..... | 3   |
| PE 115 plus two of PE 104-132 .....      | 1½  |
| PE 141 .....                             | 1½  |
| PE 143 .....                             | 1½  |
| PSYC 100A and B .....                    | 3   |
| SOCI 100 .....                           | 1½  |
| Electives .....                          | 3   |
|  | 16½ |

#### Year Two:

|                                  |     |
|----------------------------------|-----|
| COMM 202 (formerly 253) .....    | 1½  |
| ENGL 225 .....                   | 1½  |
| PE 241B .....                    | 1½  |
| PE 243 .....                     | 1½  |
| PE 244 .....                     | 1½  |
| PE 252 .....                     | 1½  |
| PE 253 .....                     | 1½  |
| PE 270 .....                     | 1½  |
| PE 351 .....                     | 1½  |
| Three of PE 104-132/461A-M ..... | 1½  |
| Electives .....                  | 1½  |
|                                  | 16½ |

#### Years Three and Four:

|  |    |
|--|----|
| Three of ADMN (approved by Adviser) .....          | 4½ |
| ED-D 417 .....                                     | 3  |
| PE 354A .....                                      | 1½ |
| PE 354B .....                                      | 1½ |
| PE 356 .....                                       | 1½ |
| PE 454A .....                                      | ½  |
| PE 454B .....                                      | 1  |
| PE 445 .....                                       | 1½ |
| SOCI 365 (or approved upper level sociology) ..... | 1½ |
| SOCI 371 .....                                     | 1½ |
| Electives .....                                    | 12 |
|  | 30 |

**Total Units for Degree** ..... 63

#### NOTES:

- Students must complete six skill performance and analysis courses from PE 104-132 and PE 461A-M.
- Of the 16½ units of electives 6 units must be approved upper level courses from faculties other than the Faculty of Education.
- When neither of the upper level sociology courses is offered, a substitute will be approved by the Leisure Service Administration Faculty Adviser.

## 11.0 BACHELOR OF SCIENCE

### 11.1 B.Sc. HONOURS AND MAJOR IN KINESIOLOGY

The School of Physical Education offers Major and Honours programs in the area of Kinesiology. The Major program requires a degree of specialization in the last two years and may permit the student to proceed to graduate study or to a professional position in the various fields associated with Kinesiology. The Honours program is recommended for students planning graduate work in any of the sub-disciplines in Kinesiology. Students who select their electives appropriately may also qualify to enter an education post degree professional program for a teaching career.

#### Major

The School of Physical Education each year will accept approximately ten students in the B.Sc. Kinesiology Major program. The deadline for receipt of application forms is January 31. A special set of application forms is required and may be obtained by writing to the School of Physical Education after the 1st of November. Applications will be considered from those who meet the following:

- the general Faculty admission requirements specified in 3.1
- interview by the School of Physical Education
- academic preparation which includes the following:
  - minimum of 6 units of science designated courses
  - grade point average of 4.00 (on 9 pt scale)
  - PE 143 with a minimum grade of B (5 pt on 9 pt scale)

In order to continue in the program a grade point average of at least 3.00 is required in every session.

#### Honours

It is recommended that students in the Kinesiology Major program seeking an Honours degree apply to the Honours Adviser of the School before the start of the third year of the program. Applicants require a minimum of 6.00 grade point average in all physical education courses (excluding PE 100 level courses) and a grade point average of 3.50 in non-physical education courses. If accepted, honours students are responsible for finding a supervisor for their honours thesis. All requirements should be completed within five academic years. The completed thesis will be examined by a three person committee including the supervisor. To graduate with an honours degree, a student must have a minimum 3.50 grade point average for all work outside the School. An Honours degree will be awarded to students who obtain:

- a graduating average of at least 3.50
- a grade point average of at least 5.50 for 300 and 400 level School of Physical Education courses
- a grade of at least B- in PE 499.

An Honours degree with distinction will be awarded to students who obtain:

- a graduating average of at least 6.50
- a grade point average of at least 6.50 for 300 and 400 level School of Physical Education courses
- a grade of at least A- in PE 499.

A student who achieves a grade lower than B- in PE 499 will graduate under the Major program providing all other requirements for the degree are fulfilled. The submission date for the thesis in PE 499 is the last day of classes.

## KINESIOLOGY PROGRAMS Recommended Sequence of Courses

#### B.Sc. Honours

##### Year One: (Arts and Science)

|   |    |
|---|----|
| *BIOL 150A/B .....                          | 3  |
| *CHEM 101 or 140 .....                      | 1½ |
| *CHEM 102 or 245 .....                      | 1½ |
| ENGL 115/116 or 121/122<br>or 150/151 ..... | 3  |
| PE 115 plus two of<br>PE 104-132 .....      | 1½ |
| *PE 141 .....                               | 1½ |
| PE 143 .....                                | 1½ |
| Electives .....                             | 3  |

##### Year Two:

|                             |    |
|-----------------------------|----|
| *MATH 100/101 or 102/151    | 3  |
| Six of PE 104-132/461A-M .. | 3  |
| *PE 241A .....              | 1½ |
| *PE 241B .....              | 1½ |
| *PHYS 102, 103 or 112 ..... | 3  |
| Electives .....             | 4½ |

#### B.Sc. Major

##### Year One: (Arts and Science)

|   |    |
|---|----|
| *BIOL 150A/B .....                          | 3  |
| *CHEM 101 or 140 .....                      | 1½ |
| *CHEM 102 or 245 .....                      | 1½ |
| ENGL 115/116 or 121/122<br>or 150/151 ..... | 3  |
| PE 115 plus two of<br>PE 104-132 .....      | 1½ |
| *PE 141 .....                               | 1½ |
| PE 143 .....                                | 1½ |
| Electives .....                             | 3  |

##### Year Two:

|                             |    |
|-----------------------------|----|
| *MATH 100/101 or 102/151    | 3  |
| Six of PE 104-132/461A-M .. | 3  |
| *PE 241A .....              | 1½ |
| *PE 241B .....              | 1½ |
| *PHYS 102, 103 or 112 ..... | 3  |
| Electives .....             | 4½ |



**Years Three and Four:**

|                      |     |
|----------------------|-----|
| Three of PE 104-132/ |     |
| 461A-M .....         | 1½  |
| PE 253 .....         | 1½  |
| *PE 341 .....        | 1½  |
| *PE 344 .....        | 1½  |
| PE 351 .....         | 1½  |
| *PE 441 .....        | 1½  |
| *PE 442 .....        | 1½  |
| *PE 444 .....        | 1½  |
| PE 447 .....         | 1½  |
| *PE 451 .....        | 1½  |
| *Approved statistics |     |
| course .....         | 1½  |
| PE 460 .....         | 1   |
| PE 499 .....         | 3   |
| Electives .....      | 13½ |

**Total Units** ..... 67 ..... 66

\* science designated units

**NOTES (Honours and Major):**

- To qualify for the Bachelor of Science degree, 33 science designated units must be completed within the program.
- Students must complete 6 units of skill performance and analysis courses which must include PE 105, PE 115, and at least two from the PE 461 series. PE 470 may be substituted for two PE 461's at a loss of ½ a unit.
- At least 12 units of electives must be selected from the science departments listed below and at least 9 of these must be at the 300 or 400 level.
 

|                               |                            |
|-------------------------------|----------------------------|
| Biochemistry and Microbiology | Computer Science           |
| Biology                       | Mathematics and Statistics |
| Chemistry                     | Physics and Astronomy      |

The following specific courses are also approved:

|             |          |
|-------------|----------|
| ANTH 100A/B | ANTH 250 |
|-------------|----------|

Selected courses in Psychology
- Of the elective units not required from the listed departments of science, no more than 6 units of these may be from the School of Physical Education.
- Students should consult with the Kinesiology Faculty Adviser regarding the areas from which the electives should be chosen.
- Honours students are advised to complete both an approved statistics course and PE 460 before entering into the final year of their program.
- Students must complete PE 143 with a minimum grade of B before being considered for entry into the School of Physical Education.

## 11.2 B.Sc. MAJOR IN KINESIOLOGY — COOPERATIVE EDUCATION PROGRAM

Please refer to page 38 for a general description of the Cooperative Education concept and general regulations governing all cooperative education students.

The School of Physical Education each year will accept a maximum of five students in this program by the selection process described under section 11.1, B.Sc. Honours and Major in Kinesiology, except that the grade point average must be at least 4.50 (instead of 4.00).

Students must maintain a grade point average of at least 3.50 and must complete four Work Terms (each a minimum duration of 13 weeks).

Each Work Term is noted on the student's academic record (grading: COM, N or F). A student who does not complete a Work Term satisfactorily will normally be required to withdraw from the program. The performance of students in this program will be reviewed after each campus term and each Work Term. Students whose performance is deemed unsatisfactory will be so informed and will be advised of the conditions they are to satisfy in order to remain in the program.

**Years Three and Four:**

|                      |    |
|----------------------|----|
| Three of PE 104-132/ |    |
| 461A-M .....         | 1½ |
| PE 253 .....         | 1½ |
| *PE 341 .....        | 1½ |
| *PE 344 .....        | 1½ |
| PE 351 .....         | 1½ |
| *PE 441 .....        | 1½ |
| *PE 442 .....        | 1½ |
| *PE 444 .....        | 1½ |
| PE 447 .....         | 1½ |
| *PE 451 .....        | 1½ |
| Electives .....      | 18 |

**Year One: (Arts and Science)**

|  |     |
|--|-----|
| *BIOL 150A/B .....                       | 3   |
| *CHEM 101 or 140 .....                   | 1½  |
| *CHEM 102 or 245 .....                   | 1½  |
| ENGL 115/116 or 121/122 or 150/151 ..... | 3   |
| PE 115 plus two of PE 104-132 .....      | 1½  |
| *PE 141 .....                            | 1½  |
| PE 143 .....                             | 1½  |
| Electives .....                          | 3   |
|  | 16½ |

**Year Two:**

|                                |     |
|--------------------------------|-----|
| *MATH 100/101 or 102/151 ..... | 3   |
| Six of PE 104-132/461A-M ..... | 3   |
| *PE 241A .....                 | 1½  |
| *PE 241B .....                 | 1½  |
| PE 253 .....                   | 1½  |
| *PHYS 102, 103 or 112 .....    | 3   |
| Electives .....                | 3   |
|                                | 16½ |

**Years Three and Four:**

|                                  |    |
|----------------------------------|----|
| Three of PE 104-132/461A-M ..... | 1½ |
| *PE 341 .....                    | 1½ |
| *PE 344 .....                    | 1½ |
| PE 351 .....                     | 1½ |
| PE 354A .....                    | 1½ |
| PE 354B .....                    | 1½ |
| *PE 441 .....                    | 1½ |
| *PE 442 .....                    | 1½ |
| *PE 444 .....                    | 1½ |
| *PE 451 .....                    | 1½ |
| Electives .....                  | 18 |
|                                  | 33 |

**Total Units for Degree** ..... 66

\* science designated units

See NOTES under 11.1 above.

Students in the Co-op program who meet the entry requirements of the Honours B.Sc. program, may be accepted into the combined program and will be eligible to apply for graduation with both the Co-op and Honours designation. Co-op students accepted into the Honours program must add an approved statistics course (1½ units), PE 460 and PE 499 to their Major program and reduce their elective requirements in years 3 and 4 to 13½ units.

## 12.0 DIPLOMA AND CERTIFICATE PROGRAMS

### 12.1 DIPLOMA IN TEACHER-LIBRARIANSHIP

This is a fifteen unit program leading to a Diploma in Teacher-Librarianship, designed to prepare teachers to function as teacher-librarians in either elementary or secondary schools. The program was developed in response to a call from the Canadian School Library Association in 1981 for a post baccalaureate diploma that would offer the field "specialty" preparation in this unique field.

Admission to the program normally requires certification and at least one year's successful teaching experience. For those teachers who have completed all or part of the former elementary program Library Education Teaching Area within the Faculty, it may be possible to replace those courses with other approved electives and complete the requirements of the Diploma. It must be noted that courses taken, for which the Diploma is awarded, may not apply toward a degree.

Normally students must complete the entire program at the University of Victoria.

The Diploma program is intended to be offered in Summer Sessions although some courses may be offered during the Winter Session both on and off-campus and through other agencies. While it is hoped that all courses will be offered over a three year cycle, it is not possible to assure students that they can complete all the requirements within that period. The program is subject to minimum enrollments and that condition may adversely affect plans to complete within a specific time period.



### DIPLOMA IN TEACHER-LIBRARIANSHIP (ELEMENTARY)

|                                    |            |
|------------------------------------|------------|
| TL 432.....                        | 1½         |
| TL 433.....                        | 1½         |
| TL 434A.....                       | 1½         |
| TL 435.....                        | 1½         |
| TL 437A.....                       | 1½         |
| TL 438.....                        | 1½         |
| ED-B 494Q*.....                    | 1½         |
| ED-B 360.....                      | 1½         |
| ED-B 361 or approved elective..... | 1½         |
| ED-B 430.....                      | 1½..... 15 |
| Pre- or corequisites:              |            |
| ED-B 341**.....                    | 3          |
| ED-B 342.....                      | 1½         |
| ED-B 343A or B.....                | 1½         |

### DIPLOMA IN TEACHER-LIBRARIANSHIP (SECONDARY)

|                                    |            |
|------------------------------------|------------|
| TL 432.....                        | 1½         |
| TL 433.....                        | 1½         |
| TL 434B.....                       | 1½         |
| TL 435.....                        | 1½         |
| TL 437B.....                       | 1½         |
| TL 438.....                        | 1½         |
| ED-B 494Q*.....                    | 1½         |
| ED-B 360.....                      | 1½         |
| ED-B 361 or approved elective..... | 1½         |
| ED-B 430.....                      | 1½..... 15 |
| Pre- or corequisites:              |            |
| ED-B 342.....                      | 1½         |
| ED-B 344.....                      | 1½         |
| ED-B 371.....                      | 3          |

\* Directed studies

\*\* May substitute other approved children's literature course (1½-3)

## 12.2 CERTIFICATE IN KODÁLY METHODOLOGY

This is a nine unit program leading to a Certificate in Kodály Methodology in Music Education, designed to provide teachers with a comprehensive background in both musicianship and pedagogy based upon the Kodály system of music instruction.

#### Year One

|             |    |
|-------------|----|
| ME 350..... | 1½ |
| ME 351..... | 1½ |

#### Year Two

|             |    |
|-------------|----|
| ME 450..... | 1½ |
| ME 451..... | 1½ |

#### Year Three

|             |    |
|-------------|----|
| ME 460..... | 1½ |
| ME 461..... | 1½ |

This program is normally offered in summer session only. Courses applied toward this Certificate *may not* also apply toward a degree. Applicants who have previously received credit toward a degree for any of these courses (or their equivalents) may substitute up to three units of courses with the consent of the Department. To be admitted to the program students must normally have a 3 unit first year university level music theory course (e.g. University of Victoria MUS 101A, 101B and 170) or a second level conservatory theory course (e.g. Royal Conservatory of Music Grade II) or the equivalent.

## 13.0 UNDERGRADUATE COURSES IN THE FACULTY OF EDUCATION

The University timetable lists the courses that will be offered in a specific session. Students should check with the appropriate Department or School regarding the upper level courses of their teaching areas.

Courses in the professional year and in specialized programs will be scheduled as part of a program and may vary from the normal timetable.

Elementary students registering in the professional year will be issued prepared timetables at the initial meeting on Tuesday, September 5, 1995. Secondary regular students will be given a preassigned course schedule from which they can make up their timetables at the initial meeting on Tuesday, September 5, 1995. Secondary Post Degree Professional Program students will have their initial meeting in early July, 1995, when they begin classes. Professional year students should not attempt to make up individual timetables before these meetings.

Courses numbered 700-799 are restricted to students accepted in a professional year. Students who wish to repeat any 700 level course must appeal to the Faculty Appeals and Adjudication Committee for permission.

Registration in all 300 level courses is restricted to students having second year standing or higher. Courses numbered 400 or above are reserved for students registered in third or following years. These regulations do not apply to the following performance oriented courses: ME 318, 418, 320, 321, 402, 420, 421. These courses may be taken by first or second year students with appropriate backgrounds.

It is the responsibility of all registrants to ensure that all calendar prerequisites for the courses in which they register have been met. Prerequisites may be waived (a) if the student has completed equivalent work, or (b) in other exceptional cases. Consult the Education Advising Centre.

Many Education courses are open to students in other faculties. Further information is printed in the University timetable.

Courses are designated as follows:

|      |  |
|------|--|
| ED-A | Department of Arts in Education                                |
| AE   | Art Education  |
| DE   | Drama Education  |
| ME   | Music Education  |
| ED-B | Department of Communication and Social Foundations             |
| TL   | Adult Education  |
|      | Curriculum Studies   |
|      | Early Childhood Education                                      |
|      | Educational Administration and Supervision                     |
|      | Educational Foundations  |
|      | Educational Technology   |
|      | Language Arts  |
|      | Teacher-Librarianship  |
| ED-C | School of Physical Education                                   |
| PE   |  |
| ED-D | Department of Psychological Foundations in Education           |
|      | Communication and Counselling                                  |
|      | Learning and Development                                       |
|      | Measurement, Evaluation and Computer Applications in Education |
|      | Special Education  |
| ED-E | Department of Social and Natural Sciences                      |
| SNSC | Mathematics Education  |
|      | Science Education  |
|      | Social Studies Education                                       |
| ED-P | Division of Professional Studies                               |

Not all courses listed hereunder will be offered every session.



# DEPARTMENT OF ARTS IN EDUCATION

## ART EDUCATION

Dr. B. Dalton, Elementary Adviser  
Dr. B. Zuk, Elementary Adviser  
Dr. D. Bergland, Secondary Adviser

## LIMITATION OF ENROLLMENT

Studio based courses are normally subject to limited enrollment because of space and equipment needs. Departmental permission is required for non-Education students.

With the exception of 204, 320 and 321 all of the following art education courses deal with classroom practice at both the elementary and secondary levels.

### A E 103 (formerly 100) (3) INTRODUCTION TO ART EDUCATION 3.4 fee units

The role of art in education; practical exploration in art, classroom management and teaching techniques. (Not available on a degree program for students who have already completed 101, 204 or ED-A 701) (Students planning to emphasize art in their degree program should register in this course.) (3-1)

### A E 200 (1½) DESIGN FOR THE CLASSROOM 1.7 fee units

Analysis of the elements and principles of design, through practical and theoretical experiences as applied to the classroom. (3-1)

### A E 201 (1½) IMAGE DEVELOPMENT FOR THE CLASSROOM 1.7 fee units

An introduction to theories, methods and practices of image development for the classroom. (3-1)

### A E 202 (1½) FOUNDATIONS IN ART EDUCATION

An introductory study of foundations of art education for elementary and secondary schools. (3-0)

### A E 204 (formerly 101) (2) ART FOR GENERAL CLASSROOM TEACHERS (Elementary) 2.3 fee units

Content of the Art program in the elementary school; principles, practice and techniques of instruction. (Not available for credit on a degree program for students who have already completed 100, 101, 103 or ED-A 701) (Students planning to emphasize art in their degree program should register in 103.) (Prerequisite: Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (2-1)

### A E 205 (1½) TWO DIMENSIONAL ART FOR THE CLASSROOM 1.7 fee units

Teaching methods, techniques and studio investigation of media in drawing, painting, design, printmaking and other two dimensional art. (3-1)

### A E 208 (1½) THREE DIMENSIONAL ART FOR THE CLASSROOM 1.7 fee units

Teaching methods, techniques and studio investigation of media in carving, modelling, construction and other three dimensional art. (3-1)

### A E 303 (3) CERAMICS 3.4 fee units

An introductory course in ceramics. Discussion and practice will include all aspects of the methods and processes as they relate to classroom practice. (Consent of an art education adviser required if 309 already completed) (3-1)

### A E 305 (1½) DRAWING FOR THE CLASSROOM 1.7 fee units

Development of skills and teaching methods in drawing through studio exploration. (Normally not available for credit on a degree program for students who have already completed 302) (3-1)

### A E 306 (1½) PAINTING FOR THE CLASSROOM 1.7 fee units

Development of skills and teaching methods in painting through studio exploration. (Normally not available for credit on a degree program for students who have already completed 302) (3-1)

### A E 307 (1½) PRINTMAKING FOR THE CLASSROOM 1.7 fee units

Development of skills and teaching methods in printmaking through studio exploration. (Normally not available for credit on a degree program for students who have already completed 300) (3-1)

### A E 308 (1½) SCULPTURE FOR THE CLASSROOM 1.7 fee units

Development of skills and teaching methods in sculpture through studio exploration. (Normally not available for credit on a degree program for students who have already completed 301) (3-1)

### A E 309 (1½) CERAMICS FOR THE CLASSROOM 1.7 fee units

Development of basic skills and teaching methods in hand built ceramics, including operation of kilns. (Normally not available for credit on a degree program for students who have already completed 303) (3-1)

### A E 310 (1½) INTRODUCTION TO APPLIED DESIGN 1.7 fee units

Introduction to skills and teaching methods in selected applied design areas through studio exploration. (Normally not available for credit on a degree program for students who have already completed 304) (3-1)

### A E 315 (1½) CURRICULUM PLANNING IN ART EDUCATION

Study of art education curriculum guides and of methods of planning programs for the classroom. (3-1)

### A E 316 (1½) ART CRITICISM SKILLS FOR THE CLASSROOM

Development of critical skills for the classroom through study of art criticism theories and field experiences. (3-1)

### A E 317 (1½) ART APPRECIATION FOR THE CLASSROOM

Methods of teaching art appreciation in the classroom with emphasis on Canadian art. Students will prepare teaching materials. (3-1)

### A E 319 (1½) PHOTOGRAPHY FOR THE CLASSROOM 1.7 fee units

Basic approaches to the use of photography as an art medium. (3-1)

### A E 320 (1½) ART AND THE YOUNG CHILD 1.7 fee units

Study and development and characteristics of child art at preschool, kindergarten and primary levels with practical experience, teaching and evaluation methods. (3-1)

### A E 321 (1½) ART IN THE INTERMEDIATE GRADES 1.7 fee units

A survey of studio methods and materials, texts, media resources, inter-disciplinary procedures and evaluation methods with an emphasis on teaching at the intermediate level. (3-1)

### A E 322 (1½) VIDEO AND COMPUTER ART FOR THE CLASSROOM 1.7 fee units

Development of skills and teaching methods in computer and video art through studio exploration. (3-1)

### A E 401 (1½ or 3) SPECIAL STUDIES

Studies of selected topics in the theory and practice of Art Education. (May be repeated up to 6 units with permission of an adviser in the Department of Arts in Education) (3-1)

### A E 402 (1½) SPECIFIC METHODOLOGIES, MATERIALS AND TECHNIQUES IN ART EDUCATION

(A student may take up to a maximum of 6 units of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the Department.) (Prerequisite: Appropriate introductory course for the selected art area) (3-1)

|      |               |  |
|------|---------------|--|
| 402A | 1.7 fee units | Drawing  |
| 402B | 1.7 fee units | Painting   |
| 402C | 1.7 fee units | Printmaking                                      |
| 402D | 1.7 fee units | Sculpture  |
| 402E | 1.7 fee units | Applied Design                                   |
| 402F | 1.7 fee units | Photography                                      |
| 402G | 1.7 fee units | Reasoned Criticism<br>(Prerequisite: 316 or 317) |
| 402H | 1.7 fee units | Ceramics (Prerequisite: 303 or 309)              |
| 402J |               | Computer and Video<br>(Prerequisite: 322)        |



**DRAMA EDUCATION**

Prof. C. Miller, Area Adviser

**D E 204 (2) DRAMA EDUCATION FOR GENERAL CLASSROOM TEACHERS (Elementary)**

Content of the drama program in the elementary school; principles, practice, and techniques of instruction. (Students planning to enter a drama education teaching area or concentration should also register in THEA 181) (Credit cannot be obtained for more than one of 204, 304) (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (2-1)

**D E 304 (1½) DRAMA EDUCATION IN THE ELEMENTARY CLASSROOM**

Content of the drama curriculum in the elementary school; principles, practice, and techniques of instruction for certificated elementary teachers. (Credit cannot be obtained for more than one of 204, 304) **NORMALLY OFFERED IN SUMMER SESSION.** (*Prerequisite:* Professional Year) (3-0)

**MUSIC EDUCATION**

Dr. B. Hanley, Elementary Adviser

Dr. G. King, Secondary Adviser

**LIMITATION OF ENROLLMENT**

Instrumental courses are normally subject to limited enrollment because of space and equipment needs. Departmental permission is required for non-Education students.

**M E 101 (1½) INTRODUCTION TO MUSIC EDUCATION**

Orientation to the profession; introduction to the role of music in education and society. Secondary level. (1½; 1½)

**M E 118 (1½) MUSIC THEATRE WORKSHOP**

In depth study of techniques and procedures related to the production of musical plays in the school. Both artistic and technical (e.g., staging, lighting, costumes, makeup) aspects will be included. (May be repeated for credit.) (3-0)

**M E 120 (1) INSTRUMENTAL JAZZ: I**

A study of historical and theoretical elements of jazz. There will be considerable emphasis on listening. (1-0)

**M E 121 (1) VOCAL JAZZ: I**

A study of techniques for teaching vocal jazz through performance and experience. This is a survey course covering repertoire, history, conducting, style, sound systems, rhythm sections, national standards. Emphasis is on participation and listening. (1-1)

**M E 201 (1½) MUSIC EDUCATION SEMINAR: I**

A study of the foundations of music education for secondary schools. School experience will be required. (*Pre- or corequisite:* 101) (2-2) or (1-0; 1-2)

**M E 204 (formerly 104) (2) MUSIC FOR GENERAL CLASSROOM TEACHERS (Elementary)**

Content of the music program in the elementary school; principles, practice, and techniques of instruction. (Students with some music background and those intending to enter a music education concentration or teaching area should register in 205/206) (Credit cannot be obtained for more than one of 106, 204, 206, 304, ED-A 705, 706) (*Prerequisite:* Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (2-1)

**M E 205 (formerly 105) (1½) MUSIC FUNDAMENTALS FOR CLASSROOM TEACHERS**

Introduction to the language of music including sight reading, ear training and analysis. Normally followed by 206. (Students with exceptionally strong music backgrounds may not be required to take this course) (Not available for credit on a degree program for students who have already completed MUS 100 or 101) (3-0)

**M E 206 (formerly 106) (1½) MUSIC IN THE ELEMENTARY SCHOOL (Introductory)**

An introduction to the foundations of music education, the elementary music curriculum, and methods currently used in B.C. elementary schools. (Not available for credit on a degree program for students who have already completed 104, 204, 304, ED-A 705 or 706) (*Pre- or corequisite:* 205 or MUS 101A, B, and 170) (3-0)

**M E 208 (1½) PIANO CLASS FOR CLASSROOM TEACHERS**

Development of piano keyboard skills useful in classroom music (for those with little or no piano background). (2-2) or (1-1; 1-1) or (1½-1; 1½-0)

**M E 216 (2) INSTRUMENTAL/CHORAL TECHNIQUES**

Practical ensemble experience for introductory level band and secondary choral with emphasis on beginning band methods and choral literature for the junior/senior secondary school choir. (2-2)

**M E 218 (1½) MUSIC THEATRE WORKSHOP (Laboratory)**

Workshop productions of one or two musical plays. (Grading: COM, N or F) (0-6)

**M E 219 (1½) CHORAL TECHNIQUES**

Practical choral techniques and literature for elementary schools — conducting and methodology. A piano component may be included. (1-2)

**M E 220 (1) INSTRUMENTAL JAZZ: II**

Topics will include theoretical concepts, composing and arranging, basic improvisation, repertoire and conducting. (*Prerequisite:* 120) (1-0)

**M E 221 (1) VOCAL JAZZ: II**

The course focuses on practical experience through participation. Emphasis is on repertoire, conducting, improvisation in the large and small vocal jazz ensemble. (*Prerequisite:* 121) (1-1)

**M E 300 (1½) THE TEACHING OF CHORAL AND CLASSROOM SINGING**

Materials and rehearsal techniques for use with elementary school choral activities. (*Prerequisite:* 205, or MUS 101A and 101B, or consent of instructor) (3-0)

**M E 301 (1½) MUSIC EDUCATION SEMINAR: II**

A study of programs and materials for secondary schools with an emphasis on general music programs. Some school experience will be required. (Grading: INC; letter grade) (*Prerequisite:* 201 and admission to the Music Teaching Area or Bachelor of Music in Secondary Education) (2-2) or (1-0; 1-2)

**M E 302 (1½) MUSIC IN EARLY CHILDHOOD**

A survey of developmental implications as they pertain to the musical growth of the young child (3-8 years). Current music education methods and materials will be studied, and laboratory experiences may be included. (Not normally available to students in a music teaching area or concentration, except with permission of the Area Adviser) (3-0)

**M E 303 (1½) CLASSROOM INSTRUMENTS**

Students will acquire a satisfactory level of proficiency for classroom purposes. (A student may take all of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the Department.) (2-2)

303A Beginning guitar for classroom teachers

303C Ukulele

303D Recorder

303E Intermediate guitar for classroom teachers

**M E 304 (1½) ELEMENTARY SCHOOL MUSIC**

A survey of texts, materials, and methods of instruction for use in the elementary classroom. Designed for certificated teachers who have normally taken a previous music education methods course and who desire familiarity with current materials and practices. (Credit cannot be obtained for more than one of 104, 106, 204, 206, 304) **NORMALLY OFFERED IN SUMMER SESSION.** (*Prerequisite:* Consent of the Education Advising Centre) (3-0)



**M E 306 (3) MUSIC IN THE ELEMENTARY SCHOOL (Advanced)**

A survey of texts and materials and methods of instruction for use in the elementary classroom. Sequential planning involving listening, singing, instrumental playing, and movement activities. A school experience component is normally included. (*Prerequisite*: 206) (3-0)

**M E 308 (1½) PIANO CLASS FOR CLASSROOM TEACHERS (Advanced)**

Continuation of development of piano keyboard skills useful in classroom music (for those with some piano background, e.g. 208 or equivalent). (2-2) or (1-1; 1-1) or (1½-1; 1½-0)

**M E 309 (1½) CANADIAN MUSIC FOR SCHOOLS**

A survey of current educational resources in Canadian music; literature, activities and teaching techniques; correlation with other classroom studies. (3-0)

**M E 310 (formerly 207) (1½) LEARNING TO LISTEN TO MUSIC**

What to listen for and how to listen to musics of diverse styles and genres; applications to the classroom. (3-0)

**M E 316 (1) INSTRUMENTAL CLINIC**

Practical ensemble experience; teaching techniques; conducting, ensemble evaluation procedures and materials at the junior/senior secondary level. (1-1)

**M E 318 (1½) MUSIC THEATRE WORKSHOP (Laboratory)**

(Description as for 218)

**M E 319 (1½) VOCAL TECHNIQUES**

Understanding vocal production, the development of good vocal technique and methodology for teaching voice development. (3-0)

**M E 320 (1) INSTRUMENTAL JAZZ: III**

Advanced jazz concepts — theoretical, improvisational, and practical. The class is organized in a laboratory band context. (*Prerequisite*: 220) (0-2)

**M E 321 (1) VOCAL JAZZ: III**

A study of more advanced theoretical, improvisational, and practical vocal jazz concepts. Emphasis is on performance. (Registration confirmed after audition.) (0-4)

**M E 400 (1½) STUDY OF SPECIFIC METHODOLOGY**

Advanced courses for those in the teaching area or concentration. (*Prerequisite*: 205, or MUS 101A and 101B, or consent of instructor) (3-0 or 1-3)

400B Orff (not available for credit to students with any Orff level/s of training)

400C Experimental Music in Schools

400E Dalcroze

**M E 401 (1½) MUSIC EDUCATION SEMINAR: III**

Initiating and maintaining instrumental programs in the schools. School experiences will be required. Secondary level. (Grading: INC; letter grade) (*Prerequisite*: 301) (2-2) or (1-0; 1-2)

**M E 402 (1½) COMPUTERS IN MUSIC EDUCATION**

The use of computers and synthesizers in the school music program. Includes the MIDI protocol. (*Prerequisite*: Admission to the B.Mus. in Music Education or B.Ed. in Music Education, or permission of the Department.) (Not available for credit on a degree program for those who have completed 400D.) (1-3)

**M E 418 (1½) MUSIC THEATRE WORKSHOP (Laboratory)**

(Description as for 218)

**M E 420 (1) INSTRUMENTAL JAZZ: IV**

(Description as for 320)

**M E 421 (1) VOCAL JAZZ: IV**

(Description as for 321)

**KODÁLY PROGRAM**

\*These courses are intended to be offered during Summer only.

**ME 350 (1½) KODÁLY — PEDAGOGY: I**

An overview of the Kodály concept, strategies and techniques for developing rhythmic and tonal skills, concepts, and musical attitudes; includes study of early childhood repertoire; songs, games, and dances related to the primary curriculum (years K-3). (Not available for credit on a degree program for students who have already completed 400A)

**\*ME 351 (1½) KODÁLY — MUSICIANSHIP: I**

Tonal and rhythmic dictation, sight reading, improvisation, conducting, and part reading; beginning level.

**\*ME 450 (1½) KODÁLY — PEDAGOGY: II**

Continuing study of techniques for developing rhythmic and tonal skills, curriculum development, and lesson planning; includes study of early intermediate repertoire (years 4-5). (*Prerequisite*: 350)

**\*ME 451 (1½) KODÁLY — MUSICIANSHIP: II**

Continuation of 351; intermediate level. (*Prerequisite*: 351)

**\*ME 460 (1½) KODÁLY — PEDAGOGY: III**

Continuing study of techniques for developing rhythmic and tonal skills, curriculum development, and lesson planning; includes study of upper intermediate repertoire (years 6-7). (*Prerequisite*: 450)

**\*ME 461 (1½) KODÁLY — MUSICIANSHIP: III**

Continuation of 451; advanced level. (*Prerequisite*: 451)

**SPECIAL STUDIES**

Contact individual Professors or Department Chair for information.

**ED-A 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — ARTS IN EDUCATION**

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

**ED-A 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — ARTS IN EDUCATION**

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

**ED-A 494 (1½) and ED-A 495 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494A and 495A Art Education

494D and 495D Drama Education

494M and 495M Music Education

**ED-A 499 (½-3) PROFESSIONAL DEVELOPMENT — ARTS IN EDUCATION**

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.) (Grading: COM, N, or F)

**ED-A 750 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL ART**

Open to students who have completed the prescribed teaching area and are admitted to professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)



**ED-A 762 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL MUSIC**

Open to students who have completed the prescribed teaching area and are admitted to professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)

**ED-A 767 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL THEATRE**

Open to students who have completed the prescribed teaching area and are admitted to professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)

**DEPARTMENT OF COMMUNICATION AND SOCIAL FOUNDATIONS****ADULT EDUCATION**

Dr. L.E. Devlin, Area Adviser

**ED-B 436 (3) ADULT EDUCATION: CONCEPTS, THEORY AND PRACTICE**

A general introduction to the study and practice of adult education. Topics include: social and historical foundations; educational purposes and norms; forms of institutional and non-institutional practice; the behaviour of adults as learners; professional roles of adult educators; policy and planning of adult education, and models of skilled practice. Related areas such as self-directed learning and distance education delivery are also considered. (3-0)

**ED-B 437 (1½) FACILITATING ADULT LEARNING**

An examination of selected issues in facilitating learning for adults including: a critical examination of the concept of Andragogy, self-directed learning and its facilitation, learning contracts, enhancing learner motivation, and cognitive/learning styles and their implications for adult learners. The course is intended for those individuals who will be involved in the design and conduct of education programs for adult learners. (3-0)

**ED-B 438 (1½) (formerly 336) PROGRAM PLANNING IN ADULT EDUCATION**

An examination of the elements associated with the planning of educational programs for adult learners in a wide variety of social and institutional settings. Specific attention will be given to program planning models, needs assessment, analysis of participants, classroom processes and instructional design, evaluation, and practical program management. Each of these program planning elements will be examined both conceptually and within the context of their actual manifestation in current adult education practice. (3-0)

**CURRICULUM STUDIES**

Dr. V. Storey, Area Adviser

**ED-B 450 (1½, formerly 3) PRIMARY CURRICULUM IN THE CLASSROOM**

The theory and practice of creating effective learning environments for the primary grades. To provide the background and critical perspective necessary for interpretation, selection, integration, implementation and evaluation of curricula. (Prerequisite: Professional Year. For P.D.P.P. students Professional Year is a corequisite) (3-0)

**ED-B 451 (1½) INTERMEDIATE CURRICULUM IN THE CLASSROOM**

Trends, research and issues of the intermediate/middle grades as a basis for curriculum development, organization and instruction. (Pre-or corequisite: Professional year. For P.D.P.P. students, Professional Year is a corequisite) (3-0)

**EARLY CHILDHOOD EDUCATION**

Dr. M. Mayfield, Area Adviser

**ED-B 339 (1½) INTRODUCTION TO EARLY CHILDHOOD EDUCATION**

An introductory survey of early childhood education designed as an initial orientation to teaching children ages three to six. The course provides an overview of typical programs, curricula, methods and materials found in early childhood education today. (Prerequisite: Registration in a degree program in Elementary Education or Child and Youth Care or permission of the instructor) (3-0)

**ED-B 440 (1½) EARLY CHILDHOOD EDUCATION**

A comparative evaluation of contemporary issues and early childhood education program models to provide a theoretical basis for curriculum development. (Pre-or corequisite: 339 or consent of the instructor; Professional year (except students in Child and Youth Care) (3-0)

**ED-B 441 (1½) EARLY CHILDHOOD EDUCATION CURRICULUM DEVELOPMENT**

An in depth study of principles, procedures, related research and literature of early childhood education curriculum development emphasizing selection and application of methods, materials, and resources for teaching day care, preschool and kindergarten children. (Prerequisite: 440 or equivalent; Professional year (except students in Child and Youth Care) (3-0)

**ED-B 448 (1½) SEMINAR AND PRACTICUM IN EARLY CHILDHOOD EDUCATION**

Observation and supervised practice teaching in the preschool and kindergarten. Course activities include weekly half day observations and a seminar. A successful post session practicum, or a project, will be required. (Pre-or corequisite: 441 or consent of the instructor; Professional year) (3-0)

**EDUCATIONAL ADMINISTRATION AND SUPERVISION**

Dr. V. Storey, Area Adviser

**ED-B 430 (1½) THE ORGANIZATION AND ADMINISTRATION OF EDUCATION IN BRITISH COLUMBIA**

Introduction to structure and process of the B.C. School System. Teacher-administration relationships. Emerging trends and controversial issues in school organization and practice. Value problems in the profession. School law and legal requirements. Public and professional relationships. Classroom management. (Prerequisite: Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (3-0)

**ED-B 431 (1½) INTRODUCTION TO EDUCATIONAL ADMINISTRATION**

The meaning and purpose of educational administration. Concepts related to the theory, tasks, authority, processes of educational administration. The Administrator — characteristics, qualifications, selection, preparation. (Pre-or corequisite: Professional year) (3-0)

**ED-B 435 (1½) SUPERVISION — SETTING, METHODS AND OVERVIEW**

An examination of leadership, change, authority and power structures and organizational climate in supervision settings. Consideration given to evaluation, motivation, techniques available for the systematic observation and analysis of teaching, and supervision of program development and evaluation. (Prerequisite: Consent of the instructor) (3-0)

**EDUCATIONAL FOUNDATIONS**

Dr. T. Fleming, Area Adviser

**ED-B 320 (1½) AN INTRODUCTION TO THE SOCIAL FOUNDATIONS OF CANADIAN EDUCATION**

An introductory course in the historical, philosophical, and sociological foundations of schooling. Emphasis is on the history of educational structures, the evolution of educational ideas, the role of the school in society, and teaching as a career. (3-0)

**ED-B 420 (3) PHILOSOPHY OF EDUCATION**

An introductory course dealing with the philosophical foundations of education and their implications for curriculum and instruction in the schools. (3-0)



**ED-B 423 (3) HISTORY OF EDUCATION**

Development of educational theory and practice from the time of ancient Greece to the present. (3-0)

**ED-B 425 (3) ANTHROPOLOGY AND EDUCATION**

Theory and perspectives from cultural anthropology relevant to the processes of education and operations of schools. (3-0)

**ED-B 427 (3) SOCIOLOGY OF EDUCATION**

The application of theory and research in sociology to the exploration of the problems and dynamics of formal schooling, teaching and learning in contemporary Canadian society. (3-0)

**EDUCATIONAL TECHNOLOGY**

Dr. G.D. Potter, Area Adviser

**ED-B 359 (1 or 1½) INTRODUCTION TO INSTRUCTIONAL TECHNOLOGY** (1.2 or 1.7 fee units)

The role of information technologies and resources in instruction, with emphasis on computers and computer applications' software; utilization of materials in schools and the role of school libraries; laboratories in basic audio visual instructional techniques. (1-2)

**ED-B 360 (1½) EDUCATIONAL TECHNOLOGY** (2 fee units)

Exploration of contemporary educational technologies: MacIntosh computer operation; applications software, hypertext, interactive laser disc systems, on-line communications; instructional applications of video, audio and photographic technologies. (2-2)

**ED-B 361 (1½) ADVANCED EDUCATIONAL TECHNOLOGY** (2 fee units)

The theoretical and practical elements of educational technology: comparative study of contemporary theories of communication; in depth practical skills in one of television production, film making, photography, graphics, microcomputing, or audio production. (Prerequisite: 360) (2-2)

**ED-B 362 (1½) THE MASS MEDIA AND EDUCATION**

The history and development of mass media in North America; the effects of radio, television and film on children's home life and school experience; the educational uses of the mass media; current developments in educational television; satellite based interactive instructional systems. (Offered in 1985-86 and alternate years) (2-2)

**ED-B 463 (1½) MEDIA AND PEDAGOGY**

The theory and forms of contemporary visual communication in education: composition and analysis techniques of television, film, video and photography and incorporation of these media into instructional design. (2-2)

**LANGUAGE ARTS**

Dr. J. Harker, Area Adviser

**ED-B 331 (1½) INTRODUCTION TO THE STUDY OF LANGUAGE ARTS IN THE ELEMENTARY SCHOOL**

An overview of the teaching of language arts and the development of oral language and literacy in the elementary school. Incorporates children's literature. (Not available for credit on a degree program for students who have completed a professional year.) (Prerequisite: Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (3-0)

**ED-B 341 (3) LITERATURE IN THE ELEMENTARY SCHOOL**

Survey of children's literature; selection of books for children; scope and sequence in the development of a literature program in the primary and intermediate grades. (3-0)

**ED-B 342 (1½) FOUNDATIONS OF READING**

Consideration of the processes and psychology of reading. (Prerequisite: Elementary professional year) (3-0)

**ED-B 343 (1½) READING IN THE SCHOOL**

Components of a total reading program: examination, evaluation, and construction of instructional materials; curricular organization. (Credit for only one of the following areas may be applied to a degree program) (3-0)

343A — Reading in the Primary Grades

343B — Reading in the Intermediate Grades

(Prerequisites: 342; professional year for students on an elementary program)

**ED-B 344 (formerly 343C) (1½) READING AND WRITING FOR LEARNING IN THE SECONDARY CLASSROOM**

The purpose of this course is to prepare prospective secondary school teachers to teach the reading, writing, and study skills required for learning in the secondary grades. (Corequisite: Professional year) (3-0)

**ED-B 349 (3) LANGUAGE IN THE ELEMENTARY SCHOOL**

Program development in listening, speaking and writing in the elementary school; principles and practices. (Prerequisite: Professional year) (3-0)

**ED-B 350 (3) FOUNDATIONS OF READING AND WRITING IN THE SECONDARY GRADES**

A study of the nature and development of reading and writing abilities in the secondary grades with specific reference to the linguistic and psychological bases of the reading and writing processes. Emphasis will be placed on the integrative nature of language processes and the place of speaking and listening in the development of reading and writing. (3-0)

**ED-B 371 (3) (formerly 351, 471) LITERATURE FOR YOUNG ADULTS**

A survey of standard, classic, and current literature for the adolescent with attention to the adolescent's response to literature and the stimulation of reading through appropriate selection of literature for young adults. Specific readings may be required in advance for this course. (3-0)

**ED-B 442 (3) CORRECTIVE READING INSTRUCTION**

A course covering classroom diagnosis and treatment of reading difficulties; prevention of reading disabilities; corrective classroom procedures. Students will become familiar with materials and procedures for the correction of various types of reading disabilities. This course is useful to the classroom teacher and to the reading specialist. A portion of the course may involve remedial work in a school setting. (Pre-or corequisite: Professional year, and 342 or permission of the instructor. Students in the Learning Assistance teaching area will be allowed to take this course without 342 provided they have completed the professional year.) (3-0; 3-0)

**ED-B 490 (3) PRINCIPLES OF TEACHING SECOND LANGUAGES**

The application of principles for teaching second languages. The examination of curriculum and methodology for use in second language programs in the elementary and secondary schools. (Prerequisite: Professional year) (3-0)

**ED-B 748 (1½) READING INSTRUCTION IN THE ELEMENTARY SCHOOL (Primary or Intermediate Grade Emphasis)**

A study of the elementary reading curriculum emphasizing selection and application of materials, resources and methods for teaching reading. (Prerequisite: Acceptance in a professional year) (2-0)

**ED-B 749 (1½) ORAL AND WRITTEN EXPRESSION IN THE ELEMENTARY SCHOOL (Primary or Intermediate Grade Emphasis)**

A study of the elementary language arts curriculum emphasizing selection and application of materials, resources and methods for teaching oral and written expression. (Prerequisite: Acceptance in a professional year) (2-0)

**ED-B 753 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL ENGLISH**

Open to students who have completed the prescribed teaching area and are admitted to the professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)

**ED-B 754 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL SECOND LANGUAGE**

754A French  
754B German  
754C Spanish  
754D Japanese  
754E Chinese  
754F Russian



Open to students who have completed the prescribed teaching area and are admitted to the professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)

### SPECIAL STUDIES

Contact individual Professors or Department Chair for information.

#### ED-B 390 (3) CLASSROOM TECHNIQUES IN TEACHING ORAL FRENCH

This course includes analysis of theoretical and practical elements of teaching French as a second language. Students will be introduced to the B.C. Curriculum Guide, methods of presentation, and use of aids. Special attention will be given to automated language teaching. (*Pre- or corequisite*: A working knowledge of oral French, as determined by the instructor) (3-0-1)

#### ED-B 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — COMMUNICATION AND SOCIAL FOUNDATIONS

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

#### ED-B 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — COMMUNICATION AND SOCIAL FOUNDATIONS

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

#### ED-B 494 (1½) and ED-B 495 (1½) DIRECTED STUDIES

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

|               |                                  |
|---------------|----------------------------------|
| 494A and 495A | Adult Education                  |
| 494D and 495D | Early Childhood Education        |
| 494E and 495E | Educational Administration       |
| 494F and 495F | Educational Foundations          |
| 494G and 495G | Educational Technology           |
| 494J and 495J | Teaching of English              |
| 494K and 495K | Language Arts                    |
| 494L and 495L | Teaching of a Second Language    |
| 494Q and 495Q | Diploma in Teacher-Librarianship |

#### ED-B 499 (½-3) PROFESSIONAL DEVELOPMENT — COMMUNICATION AND SOCIAL FOUNDATIONS

This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre. (Grading: COM, N or F)

### TEACHER-LIBRARIANSHIP

Mr. D. Hamilton, Area Adviser

#### T L 432 (formerly L E 432) (1½) THE SCHOOL LIBRARY RESOURCE CENTRE AND THE TEACHER

The school library resource centre as a vital part of the teacher's program, its philosophy and services. For all teachers — elementary and secondary. (3-0)

#### T L 433 (formerly L E 433) (1½) THE TEACHER-LIBRARIAN

The role of the teacher-librarian, administration of the school library resource centre, staffing supervision. (*Prerequisite*: Professional year) (3-0)

#### T L 434 (formerly L E 434) (1½) SCHOOL LIBRARY RESOURCE CENTRE MATERIALS

The evaluation, selection and acquisition of learning materials in all media formats. (A: Elementary emphasis; B: Secondary emphasis) (*Prerequisite*: professional year) (3-0)

#### T L 435 (formerly L E 435) (1½) CATALOGUING AND CLASSIFICATION FOR SCHOOL LIBRARY RESOURCE CENTRES

The principles and practice of basic classification systems and cataloguing rules applied to the needs of the school library resource centre. (*Prerequisite*: Professional year) (3-0)

#### T L 437 (formerly L E 437) (1½) REFERENCE SERVICES FOR SCHOOL LIBRARY RESOURCE CENTRES

The role of reference materials in meeting students' and teachers' needs. (A: Elementary emphasis; B: Secondary emphasis) (*Prerequisite*: professional year) (3-0)

#### T L 438 (formerly L E 438) (1½) PROBLEMS AND ISSUES IN TEACHER-LIBRARIANSHIP

Addresses current problems and issues facing teacher-librarianship. (*Prerequisite*: professional year) (May be repeated for credit) (3-0)

## SCHOOL OF PHYSICAL EDUCATION

Dr. F.I. Bell, Elementary and Secondary Adviser  
Dr. D.R. Nichols, Leisure Service Administration Adviser  
Dr. G.H. Van Gyn, Kinesiology Adviser

#### P E 104-132 SKILL PERFORMANCE AND ANALYSIS

The following courses are intended for students pursuing degrees in Physical Education (B.Ed., B.A., and B.Sc.). They are designed to develop each participant's level of performance, ability to analyze skills, and understanding of strategies or concepts.

#### NOTES:

1. Not all activities may be offered every year.
2. Maximum credit for activities in degree programs offered by the Faculty of Education is specified in section 4.5.
3. Each activity course is scheduled for 24 hours of instruction. Students on Physical Education programs are expected to complete most of the required activity courses in the first two years.
4. Activity courses completed prior to September 1, 1975 will not receive credit.

#### P E 104 (½) SPECIAL ACTIVITY

With special permission, may be taken more than once for credit on a degree program

#### P E 105 (½) SWIMMING

#### P E 106 (½) TRACK AND FIELD

#### P E 107 (½) GYMNASTICS: I

#### P E 108 (½) GYMNASTICS: II (*Prerequisite*: 107)

#### P E 109 (½) RECREATIONAL DANCE

#### P E 110 (½) RHYTHMICS

#### P E 111 (½) CURLING

#### P E 112 (½) ARCHERY

#### P E 113 (½) GOLF

#### P E 114 (½) CREATIVE DANCE

#### P E 115 (½) FITNESS AND CONDITIONING

#### P E 116 (½) BADMINTON

#### P E 117 (½) TENNIS

#### P E 118 (½) WRESTLING



**P E 119 (1½) CONTEMPORARY DANCE****P E 120 (1½) BASKETBALL****P E 121 (1½) SOCCER****P E 122 (1½) VOLLEYBALL****P E 123 (1½) RUGBY****P E 124 (1½) FIELD HOCKEY****P E 125 (1½) SOFTBALL****P E 126 (1½) ORIENTEERING (User fee)****P E 127 (1½) CANOEING (User fee)****P E 128 (1½) CROSS COUNTRY SKIING (User fee)****P E 129 (1½) BACK PACKING (User fee)****P E 130 (1½) ROCK CLIMBING (User fee)****P E 131 (1½) SAILING (User fee)****P E 132 (1½) KAYAKING (User fee)****P E 141 (1½) INTRODUCTORY HUMAN ANATOMY**

Lecture and laboratory orientation to human anatomy. Emphasis on the basic anatomical structures used in locomotion and fundamental motor skills. Reference made to the structural components of the circulatory, digestive, excretory and endocrine systems. Labs include examination and dissection of mammalian specimens, and extensive use of human skeletons, anatomical charts and models. (Not available for credit on a degree program for students who have already completed 242) (3-2)

**P E 142 (1½) HUMAN POTENTIAL**

Using a physical performance model as an initial paradigm, lifestyle behaviours which have the power to enhance or diminish personal potential will be studied. The course is particularly relevant for those in the field of education as it will look at some of the stresses and health concerns associated with educators. The focus of this course will be on positive performance rather than illness. Topics will include physical activity and health; decision making for health; goal setting; substance use/abuse; reflexes, habits and tendencies of our species; health consumerism and the cultural imperative. (3-0)

**P E 143 (1½) INTRODUCTION TO PHYSICAL EDUCATION**

Orientation to the profession; the aims and objectives of physical education; relationship of physical education to education, athletics, health, recreation, and safety education. (3-0)

**P E 144 (1½) ACTIVE HEALTH**

This course will prepare students to deal with topics in the British Columbia Ministry of Education Learning for Living and Physical Education curricula. As such, the course will be focused on the transmission of knowledge about contemporary health issues including safety, use of leisure time, physical fitness, nutrition and a general preparation to make informed decisions that affect the personal well-being of students. (3-0)

**P E 241A (1½) INTRODUCTION TO HUMAN CELLULAR PHYSIOLOGY**

The study of the molecular and cellular functions in man with emphasis on homeostasis, cellular transport, protein synthesis, energy metabolism, electrical properties of cells, and blood as a tissue. (3-2)

**P E 241B (1½) INTRODUCTION TO HUMAN SYSTEMIC PHYSIOLOGY**

The study of the integrated functions of physiological systems with emphasis on the nervous, endocrine, muscular, cardiovascular and respiratory systems. (Prerequisite: 141 or consent of the instructor) (Not available for credit on a degree program for students who have already completed 242) (3-2)

**P E 243 (1½) FOUNDATIONS OF RECREATION AND LEISURE**

An introduction to the nature and scope of recreation; a consideration of past influences and future trends; the role of the recreational professional. (3-0)

**P E 244 (formerly 343) (1½) CANADIAN RECREATION DELIVERY SYSTEMS**

An overview of the development and delivery of recreational programs in Canada. Canadian federal, provincial, municipal, private and volunteer agencies are described and analyzed. (3-0)

**P E 245 (1½) FOUNDATIONS OF SKILL ACQUISITION AND SKILL ANALYSIS**

This course examines the theoretical bases of skill learning. The major variables affecting performance and learning will be examined. The cognitive and physical components of skill acquisition will be analyzed. (3-0)

**P E 247 (formerly 147) (2) PHYSICAL EDUCATION FOR GENERAL CLASSROOM TEACHERS (ELEMENTARY)**

Content of the Physical Education program in elementary school; principles, practice and techniques of instruction. (Not available for credit on a degree program for students who have already completed 149 or ED-C 747) (Prerequisite: Authorization to register in the Faculty of Education or permission of the School of Physical Education) (2-1)

**P E 252 (1½) LEADERSHIP METHODS FOR RECREATION**

Theoretical and practical introduction to leadership, teaching, communication, and decision making skills in recreation/leisure services, sport, and fitness. Field experience is required as part of this course. (3-0)

**P E 253 (1½) PROGRAM PLANNING**

An analysis and application of theoretical and practical approaches for developing effective recreation/leisure services, sport, fitness, wellness, and health promotion programs. (3-0)

**P E 270 (1½) FOUNDATIONS OF OUTDOOR RECREATION**

Study of the outdoor environment as an educational and recreational medium; survey of local outdoor recreational facilities; focus on planning, implementation and evaluation of outdoor programs, outdoor/environmental ethics and safety considerations; exploration of the relationship between outdoor pursuits and the leisure services. (3-0)

**P E 341 (1½) BIOMECHANICS (formerly Kinesiology)**

Analysis of human movement and performance. The relationship of the laws of physics concerning motion, force, inertia, levers, etc., to muscular and mechanical analysis of motor skills. (3-0)

**P E 342 (1½) HISTORY OF PHYSICAL EDUCATION (formerly History and Principles of Physical Education)**

Interpretative study and analysis of physical education and sport through their historical development; current trends, social and cultural implications; relationship to education. (3-0)

**P E 344 (1½) CARE AND PREVENTION OF ATHLETIC INJURIES**

Training techniques, protective equipment and strapping for the prevention of athletic injuries; emergency procedures and first aid practices for the treatment of athletic injuries; care and retraining of injured areas. Field experience is required as part of this course. (Prerequisite: 141 and 241B or equivalent) (3-0)

**P E 346 (1½) MOTOR DEVELOPMENT AND PHYSICAL MATURATION**

An overview of motor development and maturation from the neonate to adulthood and old age. Special attention will be given to the growth and motor development characteristics of elementary and secondary school children. (No prerequisite required but a background in anatomy recommended) (3-0)

**P E 347 (1½) COMPARATIVE PHYSICAL EDUCATION**

An in depth study of physical education and sport systems in selected countries. (3-0)



**P E 348 (ED-D 348) (1½) PSYCHOLOGY OF SPORT**

An examination of the current findings in psychological research into sport and physical activity with special attention to personality characteristics of the performer, motivation for performance, cohesiveness, and spectator behaviour. (*Prerequisite*: PSYC 100A/B) (2-2)

**P E 349 (1½) TEACHING PHYSICAL EDUCATION IN EARLY CHILDHOOD**

Techniques for teaching fundamental motor skills and activities to young children. Emphasis will be on primary grade children with special attention devoted to the appropriate scope and sequencing of skills and activities. (Not available for credit on a degree program for students who are taking a Physical Education teaching area or concentration or who have credit for PE 345) (Offered only during Summer Studies) (3-0)

**P E 351 (1½) HUMAN WELLNESS**

This course is designed to equip students to build on their knowledge of the physical fitness aspects of health and to allow them to contribute to the growing fields of health promotion and wellness. Topics will include: studies of epidemiological information about the fitness and lifestyle of North Americans; the role of physical activity in stress management and stress reduction; the role of eating and exercise styles in weight management; an analysis of motivational programs designed to enhance personal and professional performance; an ecological perspective on personal and global health. (3-0)

**P E 352 (formerly one half of 452) (1½) INSTRUCTIONAL TECHNIQUES IN INDIVIDUAL ACTIVITIES (SECONDARY)**

Methods of teaching individual activities to secondary school and related groups. Field experience is required as part of this course. (*Prerequisites*: Three of 105-119 and authorization to register in the Faculty of Education) (3-0)

**P E 354A (formerly 453A) (1½) ADMINISTRATION OF LEISURE SERVICES: I**

A review of general administrative and organizational theories with particular reference to their application in leisure service agencies. Topics include: the nature of administration, structure of organizations, leadership, supervision of workers and supervision of clients. (3-0)

**P E 354B (formerly 453B) (1½) ADMINISTRATION OF LEISURE SERVICES: II**

A continuation of 354A, including budgeting, financial control, policy making, planning, goal setting, performance appraisal, public relations, meetings, office management, executive distress, and legal issues. (*Prerequisite*: 354A) (3-0)

**P E 356 (1½) PRINCIPLES OF FACILITY ADMINISTRATION**

Study of the concepts and processes of management as they apply to leisure service, recreation, fitness and health facilities. Emphasis on problem solving techniques used by administrators and managers in the planning, designing, controlling, financing, renovating and maintaining of such facilities. (3-0)

**P E 360 (1½) THE PRESCRIPTION OF EXERCISE**

This course will examine the principles of exercise and their application for the acquisition of health and/or performance in children, adults and special populations such as athletes, the elderly, and the obese. (3-2)

**P E 361 (formerly 463) (1½) COACHING STUDIES**

An in depth study of coaching theory. Students who successfully complete the course will receive the Coaching Association of Canada's Level 1 and 2 theory certification. The course will require a practical coaching experience in a sport of the student's choice. (Not available for credit to students with PE 463) (Grading: INP; letter grade) (3-3)

**P E 367 (1½) CURRICULUM AND INSTRUCTION IN GAMES**

This course examines developmentally appropriate games experiences for students from kindergarten to grade 7. Instructional techniques and curriculum development recognizing the special needs of all children will be included. Field experiences will be required as part of this course. (*Prerequisite*: authorization to register in the Faculty of Education) (3-0)

**P E 377 (1½) CURRICULUM AND INSTRUCTION IN DANCE**

This course examines developmentally appropriate dance experiences for students from kindergarten to grade 7. Instructional techniques and curriculum development recognizing the special needs of all children will be included. Field experiences will be required as part of this course. (*Prerequisite*: authorization to register in the Faculty of Education) (3-0)

**P E 387 (1½) CURRICULUM AND INSTRUCTION IN GYMNASTICS**

This course examines developmentally appropriate gymnastics experiences for students from kindergarten to grade 7. Instructional techniques and curriculum development recognizing the special needs of all children will be included. Field experiences will be required as part of this course. (*Prerequisite*: authorization to register in the Faculty of Education) (3-0)

**P E 441 (1½) EXERCISE PHYSIOLOGY**

The anatomical and physiological adaptation of the human body to exercise and training; the relationship of exercise to hypokinetic diseases; nutrition of the athlete. (*Prerequisite*: 241A and B or 242) (3-2)

**P E 442 (1½) MOTOR CONTROL AND LEARNING**

The neuropsychological substrates of motor control; the cognitive bases of skilled performance and skill learning. (*Prerequisite*: 3rd year standing in a Physical Education program) (3-2)

**P E 443 (1½) ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION**

Nature and function of administration; management of equipment and facilities; organization and management of programs of physical education and athletics; survey of the organization in Canadian schools. (*Prerequisites*: 4th year standing in a Physical Education program; and authorization to register in the Faculty of Education) (3-0)

**P E 444 (1½) MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**

Use of laboratory and field tests in the assessment of physical performance and physique. Test administration and interpretation of results. (A background in physiology recommended) (3-2)

**P E 445 (1½) DEVELOPMENTAL AND ADAPTIVE PHYSICAL ACTIVITY**

This course examines physical education and recreation activities for atypical individuals. Methods of assessing physical performance, adapting equipment and facilities and applying programming techniques will be explored. Field experience is required as part of this course. (3-0)

**P E 447 (1½, formerly 3) (formerly 447B) KINESIOLOGY SEMINAR AND PRACTICUM**

A seminar addressing topics pertinent to the Kinesiology field. The practicum will involve aspects of program planning and, where possible, direct leadership responsibilities. (*Prerequisite*: 253; 4th year standing in a Physical Education program) (1-6)

**P E 448 (1½) TEACHING PHYSICAL EDUCATION IN THE INTERMEDIATE GRADES**

Techniques for teaching skills related to games, gymnastics and dance. Emphasis will be on intermediate grade children with special attention devoted to the appropriate scope and sequencing of skills and activities. (Not available for credit on a degree program for students who are taking a Physical Education teaching area or concentration or who have credit for PE 446) (Offered only during Summer Studies) (3-0)

**P E 449 (1½) PHYSICAL PARAMETERS OF AGING**

An overview of the anatomical and physiological changes associated with human aging. Relationships between hypokinetic (inactivity induced) disease, stress, and nutritional habits to aging and the merits of various intervention strategies. (3-0)

**P E 451 (1½) ADULT FITNESS AND EXERCISE MANAGEMENT**

A study of the theory and practice of adult physical fitness as it relates to health enhancement and preventive medicine. (3-0)



**P E 452 (1½, formerly 3) INSTRUCTIONAL TECHNIQUES IN TEAM ACTIVITIES (SECONDARY)**

Methods of teaching team activities to secondary school and related groups. Field experience is required as part of this course. (*Prerequisites*: Three of 120-125 and authorization to register in the Faculty of Education) (3-0)

**P E 454A (½) CONTEMPORARY ISSUES IN RECREATION: I**

Addresses the problems and challenges facing the recreation profession. (*Prerequisites*: Completion of three work terms in the Leisure Service Administration Program; and authorization to register in the Faculty of Education) (1-0)

**P E 454B (1) CONTEMPORARY ISSUES IN RECREATION: II**

Addresses the problems and challenges facing the recreation profession and attempts to provide a synthesis for the graduating student. (*Prerequisites*: Completion of 454A and four work terms in the Leisure Service Administration program or consent of instructor; and authorization to register in the Faculty of Education) (2-0)

**P E 460 (1) HONOURS SEMINAR**

Seminars will be arranged by the School and are compulsory for 4th year Honours students. (Grading: COM, N, OR F)

**P E 461 (½) ADVANCED SKILLS AND OFFICIATING**

In depth study of skill areas selected by the student, including advanced skill performance and officiating to an approved level. (Students in a secondary program must register in three of the areas listed below at ½ unit each. A student may take all of the following areas; however, the maximum number of units accepted for credit on the student's degree program will be at the discretion of the School.) (*Prerequisite*: Credit in the related 100 level course) (NOTE: Not every area will be offered each year. Candidates are asked to consult the School of Physical Education before registering.) (1-0)

|      |              |      |                 |
|------|--------------|------|-----------------|
| 461A | Badminton    | 461G | Soccer          |
| 461B | Basketball   | 461J | Swimming        |
| 461C | Dance        | 461K | Tennis          |
| 461D | Field Hockey | 461L | Track and Field |
| 461E | Gymnastics   | 461M | Volleyball      |
| 461F | Rugby        |      |                 |

**P E 463 (½) COACHING**

An in-depth study of coaching theory. Students who successfully complete the course will receive the Coaching Association of Canada's Level 1 and 2 theory certification. The course will require a practical coaching experience in a sport of the student's choice. (Permission to register must be obtained from the Education Advising Centre. Not available for credit to students with PE 361)

(Grading: letter grade, INP) F(2-0)

**P E 470 (1½) OUTDOOR RECREATION (ADVANCED)**

Examination of outdoor recreation skills as a teaching medium; focus on professional outdoor recreation leadership skills, knowledge and techniques. (*Prerequisites*: 270 and three outdoor activities chosen from 126-132, or consent of instructor) (2-2)

**P E 499 (3) HONOURS THESIS OR TUTORIAL**

Research under the direction of faculty for Honours students only. (Grading: INP, letter grade)

**ED-C 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — PHYSICAL EDUCATION**

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

**ED-C 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — PHYSICAL EDUCATION**

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

**ED-C 494 (1½) and ED-C 495 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494V and 495V Physical Education

**ED-C 499 (½-3) PROFESSIONAL DEVELOPMENT — PHYSICAL EDUCATION**

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)

(Grading: COM, N, or F)

**ED-C 764 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY PHYSICAL EDUCATION**

Open to students who have completed the prescribed teaching area or who are admitted to the professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies.

(3-0)

## DEPARTMENT OF PSYCHOLOGICAL FOUNDATIONS IN EDUCATION

### COMMUNICATION AND COUNSELLING

Dr. Max R. Uhlemann, Area Adviser

**ED-D 316 (1½) VERBAL COMMUNICATION**

Study of interpersonal verbal skills and processes. Skill practice and analyzed applications to classroom, counselling, family, social work and mental health. (3-0)

**ED-D 317 (1½) NONVERBAL COMMUNICATION**

Study of nonverbal interactions: movement, posture, gesture, qualities of voice, and spacing. Analysis of implications in teaching, counselling, family relations, mental health. (3-0)

**ED-D 414 (3) GROUP PROCESSES**

Analysis of group decision making; discovery and discussion methods in group learning; study of group interaction in classrooms, family life, counselling, and mental health. First portion of course is devoted to skill development, second part to analysis, theory and research. (3-0)

**ED-D 417 (3) HELPING RELATIONSHIPS**

Study of helping relationships in the classroom, counselling, family life, and mental health. Theories of personal effectiveness; analysis and practice of effective relating skills. The course is conducted as a participative seminar and includes skill building laboratory experience. (3-0)

**ED-D 433 (1½) LEARNING FOR LIVING I: AN OVERVIEW**

To prepare teachers, counsellors and child care workers for teaching or conducting the "Learning for Living" program. Topics include providing for individual responsibility, social awareness, relationship enhancement, and lifelong development. (3-0)

**ED-D 434 (1½) LEARNING FOR LIVING II: CONTENT AREAS**

To prepare teachers and counsellors to conduct programs in awareness of family influences, family growth, and human sexuality; and in decision making in matters related to sexual development. Attention will also be given to programs for child abuse prevention and healthy living. (3-0)



**ED-D 435A (1½) PEER HELPING: TRAINING ISSUES**

An examination of the use of peers in the helping/learning process in a variety of populations and settings; topics include the theory and research in peer helping, peer tutoring, peer mentoring and peer counseling. Emphasis will be placed on skill building and training expertise necessary to organize and train a variety of peer groups in educational and community settings. Experiential learning cycles will be emphasized. Participants are strongly urged to take this course concurrently with ED-D 435B. (3-0)

**ED-D 435B (1½) PEER HELPING: PROGRAM IMPLEMENTATION ISSUES**

This course will cover the variety of strategies used to develop, implement and evaluate a peer program. Topics such as initiating change, consulting with decision makers, organizing action teams, selecting peer helpers, and creating an effective training curriculum. Approaches to supervision and evaluation will be examined. Participants are strongly urged to take this course concurrently with ED-D 435A. (3-0)

**LEARNING AND DEVELOPMENT**

Dr. B. Harvey, Area Adviser

**ED-D 300 (formerly 200) (1½) INTRODUCTION TO EDUCATIONAL PSYCHOLOGY**

The application of psychological principles to elementary classroom practice. (Credit toward a program cannot be granted for more than one of 200, 200A, 200B, 300, 303, 401 or 403.) (*Prerequisite*: Authorization to register in the Faculty of Education or permission of the Education Advising Centre)

**ED-D 305 (3) PSYCHOLOGY OF CHILDHOOD**

Mental, social, emotional and physical characteristics of preschool and elementary school pupils, their interests and problems; emphasis upon classroom implications. (Credit toward a program cannot be granted for more than one of 305 or 403.) (*Prerequisite*: Authorization to register in the Faculty of Education or permission of the Education Advising Centre) (3-0)

**ED-D 306 (1½) ADVANCED EDUCATIONAL PSYCHOLOGY: CHILD DEVELOPMENT DURING THE PRESCHOOL YEARS**

An advanced course with special emphasis on early education; consideration of language, motor skills, and cognitive development, from birth to six years. Observation techniques, the interview, and other approaches to child study will be stressed. (*Prerequisite*: 305 or equivalent) (3-0)

**ED-D 348 (PE 348) (1½) PSYCHOLOGY OF SPORT**

An examination of the current findings in psychological research into sport and physical activity with special attention to personality characteristics of the performer, motivation for performance, cohesiveness, and spectator behaviour. (*Prerequisite*: PSYC 100A/B) (2-2)

**ED-D 401 (formerly 303) (1½) INTRODUCTION TO PSYCHOLOGY OF CLASSROOM LEARNING**

An introduction to the psychology of learning in the secondary school. (Credit toward a program cannot be granted for more than one of 200, 200A, 200B, 300, 303, 401 or 403) (3-0)

**ED-D 403 (4½) EDUCATING THE DEVELOPING LEARNER**

An integrated approach to planning for effective learning and to managing ineffective learning patterns in children. The developmental needs of children, their learning characteristics and the cultural and multicultural factors in the modern classroom will be considered. (Not open to students who have completed any of ED-D 300, 305, 400 or 401) (Available to elementary PDPP students only or by permission of the Education Advising Centre) (4½-0)

**ED-D 406 (3) PSYCHOLOGY OF ADOLESCENCE**

The physiological, psychological, social, and educational aspects of adolescence. (3-0)

**MEASUREMENT, EVALUATION AND COMPUTER APPLICATIONS IN EDUCATION**

Dr. W. Muir, Area Adviser

**ED-D 337 (1½) EVALUATION OF STUDENT ACHIEVEMENT**

The construction of classroom measures; including rating scales, self reports, check lists, performance tests, essay and objective tests; organization, use and reporting of assessment data. (*Corequisite*: Professional year) (3-0)

337A Evaluation in the Arts

337B Evaluation in the Humanities and Social Sciences

337C Evaluation in Physical Education

337D Evaluation in Elementary Classrooms

337E Evaluation in the Sciences and Mathematics

**ED-D 338 (1½) MICROCOMPUTERS IN THE CLASSROOM**

An introduction to the concepts and skills required by teachers for effective classroom microcomputer use; modes of computer aided learning; strategies for developing computer literacy. (3-0)

**ED-D 402 (1½) ASSESSMENT FOR SPECIAL EDUCATION**

This course is designed to provide an in depth study of the area of formal and informal assessment of the exceptional child. Topics include techniques, methods and purposes of assessment, factors important in selecting and administering standardized tests for the purpose of planning educational alternatives, technical information required to interpret tests adequately, and limitations on interpretation. (*Prerequisite*: 337 or consent of instructor) (Note: It is recommended that students take 405 first or concurrently with this course) (3-0)

**ED-D 438 (1½) MICROCOMPUTERS AND THE CURRICULUM**

Evaluation of educational software with an emphasis on integrating microcomputer use with curricula; creation of program materials; consideration of the effects of microcomputers on their users. (*Prerequisite*: 338 or consent of instructor) (3-0)

**SPECIAL EDUCATION**

Dr. Dan G. Bachor, Area Adviser

**ED-D 400 (1½) LEARNING DIFFICULTIES IN THE ELEMENTARY CLASSROOM**

An introduction to the nature, scope and recognition of learning difficulties commonly encountered in the elementary grades. Emphasis is placed on ineffective learning behaviour patterns and the development of a repertoire of interactional and instructional teacher strategies for effective in-classroom remediation. Some attention will be given to issues in the integration (mainstreaming) of students with severe problems of learning and behaviour. (Credit toward a program cannot be granted for more than one of 400 or 403) (2-0)

**ED-D 404 (1½) LEARNING DIFFICULTIES IN THE SECONDARY CLASSROOM**

An introduction to the nature, scope, and recognition of learning difficulties encountered in the secondary classroom. Some attention will be given to integration (mainstreaming) of students with severe problems of learning and behaviour. (*Pre- or corequisite*: Professional year) (3-0)

**ED-D 405 (3) EDUCATIONAL EXCEPTIONALITY**

An introductory survey course intended to familiarize students with the needs of children and adolescents with varying exceptionalities. Topics include history of special education services, parents and families of special needs children, mental retardation, learning disabilities, emotional disturbance, the gifted, children with speech and language problems, hearing and vision loss, physical impairments, and chronic health problems. (*Prerequisite*: 300 or 305 or 401 or 403 or 406) (Note: 405 is normally a pre- or co-requisite course for 410A and 415) (3-0)

**ED-D 409A (1½) EDUCATION OF THE EXCEPTIONAL CHILD — THE GIFTED**

Identification procedures; early school admission and acceleration; setting goals for instruction; effective teaching methods; currently operating programs. (*Prerequisite*: Professional year) (3-0)



**ED-D 410A (1½) EDUCATING INDIVIDUALS WITH MENTAL RETARDATION**

Considers learning needs and characteristics of children and adults with mental retardation and presents methods of educating and programming. Also to be discussed are physiological and social causes of retardation, basic methods of assessment for instructional purposes, and principles of community living. (*Pre-or corequisites*: 405; professional year.) (NOTE: The professional year prerequisite is waived for students in the School of Child and Youth Care.) (3-0)

**ED-D 411 (1½ or 3) PROBLEMS OF ATTENTION AND BEHAVIOUR**

Supervised practice and/or theoretical considerations in working with children who present mild to severe problems in behaviour. (The course is offered in two sections, as described below, and only one of these is scheduled in any given session. Consult the Department for further information.) (*Pre-or corequisite*: Professional year) (NOTE: The professional year prerequisite is waived for students in the School of Child and Youth Care.)

**ED-D 411A (1½)** A consideration of objectives and methods in working with children who present mild to severe problems in behaviour. Strategies for working with individuals and groups are presented and evaluated. (Not available for credit on a degree program for students who have completed 411B) (3-0)

**ED-D 411B (3)** A consideration of objectives and methods in working with children who present mild to severe problems in behaviour. Strategies for working with individuals and groups are presented, evaluated and practised. Students enrolling in this course must reserve two one and a half hour periods in their timetables in either mornings or afternoons for the required practicum component. (Not available for credit on a degree program for students who have completed 411A) NO(2-2)

**ED-D 415 (3) ASSESSMENT AND REMEDIATION OF LEARNING DIFFICULTIES**

A consideration of assessment strategies and instructional methods and materials appropriate for the identification and remediation of learning difficulties. (Students in this course must reserve three one hour periods in their timetables for the required practicum. During this practicum component, the concentration is on language arts and mathematics.) (It is recommended that students take the following courses first or concurrently with this course: 405, ED-B 442, ED-E 484.) (*Prerequisite*: Professional year) (NOTE: The professional year prerequisite is waived for students in the School of Child and Youth Care.) (3-3)

**ED-D 496 (1½) PRACTICUM IN SPECIFIED AREAS OF TEACHING**

Supervised practice in teaching children who learn inefficiently or ineffectively in regular classroom settings. A post session practicum in May normally will be required. (A student may take all of the following areas; however, the maximum number of units accepted for credit on a student's degree program will be at the discretion of the Education Advising Centre.)

496A Teaching the gifted child.

*Pre-or corequisite*: 409A; professional year

496C Teaching students with mental retardation.

*Pre-or corequisite*: 410A; professional year

496E Teaching the child with attention or behaviour problems.

*Pre-or corequisite*: 411A; professional year

496F Teaching the child with learning disabilities.

*Pre-or corequisite*: 415; professional year

(Students anticipating enrollment in 496 should make early inquiry to the Department of Psychological Foundations in Education to determine availability of supervisory personnel and school placement. In general, course activities require a time commitment of one half day per week throughout the second term.) (Grading: INC; COM, N, or F)

**SPECIAL STUDIES**

Contact individual Professors or Department Chair for information.

**ED-D 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — PSYCHOLOGICAL FOUNDATIONS**

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

**ED-D 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — PSYCHOLOGICAL FOUNDATIONS**

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

**ED-D 494 (1½) and ED-D 495 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494B and 495B Helping Profession

494H and 495H Educational Psychology

494S and 495S Special Education

494W and 495W Remedial

**ED-D 499 (½-3) PROFESSIONAL DEVELOPMENT — PSYCHOLOGICAL FOUNDATIONS**

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)

(Grading: COM, N, or F)

**DEPARTMENT OF SOCIAL AND NATURAL SCIENCES****MATHEMATICS EDUCATION**

Dr. W. Liedtke, Elementary Adviser, Primary

Dr. I. Burbank, Elementary Adviser, Intermediate

Dr. L. Francis-Pelton, Secondary Adviser

**SNSS 343 (formerly ED-E 343) (1½) MATHEMATICS: A HUMAN ENDEAVOUR**

A study of the foundations and processes of mathematics for elementary and middle school teachers. Topics include: the nature and history of mathematics; mathematical thinking and processes; and problem solving strategies and skills. (*Prerequisites*: Math 160A and 160B or equivalent) (3-0)

**ED-E 438B (1½) COMPUTER APPLICATIONS IN THE INSTRUCTION OF SECONDARY MATHEMATICS**

A study of the instructional uses of the microcomputer in the teaching and learning of mathematics in the secondary school. The emphasis is on computer programs and programming activities which allow the

student to investigate concepts and solve problems in mathematics. Commercial software designed for use in computer assisted instruction will also be examined and evaluated. (*Prerequisites*: 6 units of university level mathematics and computer experience satisfactory to the instructor or completion of an introductory module) (2-2)

**ED-E 443 (1½) MATHEMATICS CURRICULUM IN THE ELEMENTARY SCHOOL**

Goals of mathematics teaching and learning; examination of programs, instructional materials, teaching strategies, classroom settings and evaluation procedures; current trends and issues. (*Prerequisite*: Professional year or permission of the instructor) (3-0)

**ED-E 444 (1½) MATHEMATICS INSTRUCTION IN THE ELEMENTARY SCHOOL**

Teaching strategies; classroom organization; learning activities and settings; evaluation procedures; instructional materials, their function and use. (*Prerequisite*: Professional year) (3-0)



**ED-E 484 (1½) DIAGNOSIS AND INTERVENTION IN MATHEMATICS**

Identification of strengths and weaknesses; interview strategies, procedures and settings; interpretation of error patterns; intervention objectives and strategies. (*Prerequisite:* Professional year) (3-0)

**ED-E 743 (2) CURRICULUM AND INSTRUCTION IN MATHEMATICS IN THE ELEMENTARY SCHOOL**

An examination of the mathematics curriculum and instructional procedures for teaching mathematics; scope and sequence, objectives, classroom settings, teaching strategies, manipulative aids, learning activities, and evaluation procedures. (*Prerequisite:* Acceptance in a professional year) Y(3-0)

**ED-E 761 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL MATHEMATICS**

Open to students who have completed the prescribed teaching area and are admitted to the professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)

**SCIENCE EDUCATION**

Dr. L. Yore, Elementary Adviser

Dr. P. Farragher, Secondary Adviser (Biology/Chemistry/Physics)

**SNSC 145A (formerly ED-E 145A) (1½) PHYSICAL SCIENCE**

Topics from physics as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (Not required for students who have taken Physics 11 or higher within the last ten years) (2-2)

**SNSC 145B (formerly ED-E 145B) (1½) EARTH SCIENCE**

Topics from astronomy, geology, meteorology and oceanography as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (Not required for students who have taken Earth Science 11 or Geology 12 or higher within the last ten years) (2-2)

**SNSC 145C (formerly ED-E 145C) (1½) BIOLOGICAL SCIENCE**

Topics from biology and ecology as applied in the elementary school science curriculum; focus is on general understanding of principles and concepts. (One of PE 141, 241A, or 241B is acceptable in lieu of 145C on the elementary degree program.) (Not required for students who have taken Biology 11 or higher within the last ten years) (2-2)

**SNSC 345A (formerly ED-E 345A) (1½) SELECTED TOPICS IN GENERAL SCIENCE**

Topics selected from astronomy, biology, chemistry, geology, physics, and the nature and history of science will be studied. Topics will be selected for their relevance to elementary science education. (*Prerequisite:* two of 145A, B or C or their equivalents) (2-2)

**SNSC 345B (formerly ED-E 345B) (1½) SCIENCE-TECHNOLOGY-SOCIETY ISSUES IN SCIENCE EDUCATION**

The interplay of science, technology and society with special reference to the Canadian context. The influence of such issues on elementary and secondary science curricula. Consideration of instructional approaches to issues in school science. Canadian contributions to the growth of science will be studied. (2-2)

**SNSC 373 (formerly ED-E 373) (1½) ENVIRONMENTAL EDUCATION**

An introductory course which will explore the major ecosystems in B.C. as a focus for instruction and curriculum development. The course will lend itself to a multidisciplinary approach and should be of interest to park interpreters, environmentalists and teachers of all subjects and grade levels. Topics include: goals for environmental and outdoor education; nature studies; current issues and trends; teaching strategies; and program and curriculum development. Fieldtrips to local pond, lake, forest, bog and marine communities. (Not available for credit to students who have already completed ED-E 374) (2-2)

**SNSC 375 (formerly ED-E 375) (1½) MARINE EDUCATION (2½ weeks: offered in summer only) Bamfield Marine Station**

An introductory course which explores the marine environment as a focus for curriculum development and instruction. Topics will include goals for marine education, current marine resource management issues, teaching strategies, and program and curriculum development. Selected fieldtrips.

**SNSC 376 (formerly ED-E 376) (1½) MARINE BIOLOGY FOR TEACHERS**

(2½ weeks: offered in summer only) Bamfield Marine Station

A course of lectures, labs and field trips for teachers. Major topics will include oceanography, the natural history of marine organisms, seashore ecology and human impacts emphasizing the Pacific Northwest. The course is intended to provide information and experience which will enrich science, environmental and natural history courses for students of all levels from primary to adult.

**ED-E 438C (1½) COMPUTER APPLICATIONS IN THE INSTRUCTION OF SECONDARY SCIENCE**

A study of the instructional uses of the microcomputer as a tool in the teaching of science. Consideration is given to the learning that may be achieved through teacher and student use of the computer and application packages. Topics include: impact of the computer on science education; computer assisted learning; data collection and control of experiments; problem solving; simulations; and classroom evaluation. (*Prerequisites:* Computer experience satisfactory to the instructor or completion of an introductory module) (2-2)

**ED-E 445A (formerly half of 445) (1½) SCIENCE INSTRUCTION IN THE ELEMENTARY SCHOOL**

Topics considered will include inquiry teaching, children's science learning, compatibility of teaching strategies and learning styles, teaching thinking skills in science, and research on science instruction. (*Prerequisite:* Professional year) (3-0)

**ED-E 445B (formerly half of 445) (1½) CONTEMPORARY ISSUES IN ELEMENTARY SCIENCE CURRICULA**

Topics considered will include goals for science teaching, societal influences, current curricula, modifying existing curricula, future trends, evaluation of science learning, and implementing curricular changes. (*Prerequisite:* Professional year) (3-0)

**ED-E 473 (1½) ENVIRONMENTAL ISSUES EDUCATION**

This course is designed to familiarize the educator with a range of environmental issues of both local and global proportions as a focus for program planning and curriculum development. The course will take an inter-disciplinary approach and include teaching strategies for helping students clarify and resolve environmental issues. Selected field trips. (2-2)

**ED-E 745 (2) CURRICULUM AND INSTRUCTION IN ELEMENTARY SCIENCE**

A study of the curriculum organization and techniques of instruction in elementary science. The course will include consideration of both the content and strategies for teaching elementary health education. (*Prerequisite:* Acceptance in a professional year) Y(3-0)

**ED-E 769 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL SCIENCE**

Open to students who have completed the prescribed teaching area and are admitted to the professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (Students with teaching areas in biology, chemistry, or physics will enroll in this course) (3-0)



**SOCIAL STUDIES EDUCATION**

Dr. T. Riecken, Elementary Adviser  
Dr. R. Fowler, Secondary Adviser

**SNSC 346 (formerly ED-E 346) (1½) SOCIAL STUDIES IN THE ELEMENTARY SCHOOL**

A study of the concepts, processes and their development within contemporary curricula for elementary school social studies. An interdisciplinary social studies exploration of the central themes will consider the family, the community, the interactions of families, communities and environment, the cultures, and the ethnic composite of Canada. (3-0)

**ED-E 446 (1½) (formerly half of 346) APPROACHES IN TEACHING THE SOCIAL STUDIES CURRICULUM (1-7)**

Research trends, learning approaches and instructional strategies will be examined in depth as they apply to the Social Studies curriculum. (Prerequisite: Professional year or permission of instructor) (3-0)

**ED-E 746 (2) CURRICULUM AND INSTRUCTION IN ELEMENTARY SOCIAL STUDIES**

A study of the curriculum organization and techniques of instruction in elementary social studies. Examples are drawn from a variety of content areas: history, geography, anthropology, sociology, political science, economics and community services including health. (Prerequisite: Acceptance in a professional year) Y(3-0)

**ED-E 755 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL GEOGRAPHY**

Open to students who have completed the prescribed teaching area and are admitted to the professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)

**ED-E 758 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL HISTORY**

Open to students who have completed the prescribed teaching area and are admitted to the professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)

**SPECIAL STUDIES**

Contact individual Professors or Department Chair for information.

**ED-E 438A (1½) COMPUTER APPLICATIONS IN THE INSTRUCTION OF ELEMENTARY SCHOOL MATHEMATICS, SCIENCE AND SOCIAL STUDIES**

Advanced study of specific instructional applications of the microcomputer to the teaching and learning of elementary school mathematics, science and social studies. Consideration is given to whole class, small group and individual use of microcomputers and appropriate software. Topics include: Logo, problem solving, graphing, time lines, direct data storage and retrieval, report writing, mapping and data banks. Emphasis

will be given to advanced uses of the microcomputer other than drill and practice. (Prerequisite: ED-D 338 or consent of the instructor) (2-2)

**ED-E 447 (1½) MATHEMATICS, SCIENCE AND SOCIAL STUDIES IN EARLY CHILDHOOD EDUCATION**

A survey of mathematics, science and social studies content, materials, methods suitable for children from ages three to six. (Prerequisite: ED-B 440 or consent of instructor; professional year) (3-0)

**ED-E 480 (1½ or 3) CONTEMPORARY ISSUES IN EDUCATION — SOCIAL AND NATURAL SCIENCES**

Current topics and developments in education, with particular consideration of their relevance to the schools of British Columbia. This will be taught from an interdisciplinary approach. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

**ED-E 487 (1½ or 3) SPECIAL TOPICS IN EDUCATION — SOCIAL AND NATURAL SCIENCES**

Topics of current interest or concern to groups of students. (With permission of the Education Advising Centre may be taken more than once for credit on a degree program) (3-0)

**ED-E 757 (1½) CURRICULUM AND INSTRUCTION IN SECONDARY SCHOOL HUMANITIES AND SOCIAL SCIENCES**

Open to students who have completed a prescribed teaching area and are admitted to the professional year, or who have special permission of the Education Advising Centre. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (3-0)

**ED-E 494 (1½) and ED-E 495 (1½) DIRECTED STUDIES**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

|               |                       |
|---------------|-----------------------|
| 494M and 495M | Teaching of Geography |
| 494N and 495N | Teaching of History   |
| 494P and 495P | Social Studies        |
| 494R and 495R | Mathematics Education |
| 494U and 495U | Outdoor Education     |
| 494X and 495X | Science Education     |

**ED-E 499 (1½-3) PROFESSIONAL DEVELOPMENT — SOCIAL AND NATURAL SCIENCES**

(This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre.)

(Grading: COM, N or F)

**DIVISION OF PROFESSIONAL STUDIES**

All courses which have a practicum component are governed by the "Regulations Concerning Practica", section 4.4 of this calendar. No course containing school experience practica may be challenged. Students are directed to the section, "School Experience, Student Teaching and Seminars", section 5.1 of this calendar. Further, students who wish to repeat any ED-P course with a practicum must appeal to the Faculty Appeals and Adjudication Committee for permission.

**SCHOOL EXPERIENCE**

Dr. H. David Turkington, Director  
Mrs. Helen Bandy, Coordinator, Elementary School Experiences  
Mr. Earl Cherrington, Coordinator, Secondary School Experiences

**ED-P 287 (1½) PROFESSIONAL STUDIES ELEMENTARY SEMINAR AND PRACTICUM**

An examination of the process of becoming a teacher, with emphasis on developing a realistic perspective on the teacher's role in a changing

society; communication skills; and interpersonal relations. Seminars will be held twice weekly in the first or second term. A two-week school experience will be required following examinations in April. (Prerequisite: Admission to the B.Ed. Elementary Curriculum program. Not available for credit to students who have credit for ED-P 187 or ED-P 197) (Grading: INC; COM, N or F)

**ED-P 387 (1½) PRE-PROFESSIONAL YEAR ELEMENTARY SEMINAR AND PRACTICUM**

Weekly seminars dealing with formal analysis of teaching and acquisition of teaching skills, plus a minimum of 8 hours of microteaching. Skills are applied during school experience activities. A two week post session practicum following final examinations is required. (Prerequisite: 287 or permission of the Education Advising Centre; Pre- or corequisite: ED-D 300 or ED-D 403) (Grading: INC; COM, N or F)



**ED-P 397 (1½ or 3) SPECIAL PREPROFESSIONAL YEAR  
ELEMENTARY SEMINAR AND SCHOOL EXPERIENCE**

A seminar to be conducted prior to the professional year that will deal with the examination and acquisition of skills specific to the needs of special situations. The course will include experiences in the special setting. (Grading: INC; COM, N or F)

**ED-P 398 (1½) THIRD YEAR SECONDARY SEMINAR AND  
SCHOOL EXPERIENCE**

A program of regularly scheduled seminars in which students will receive some instruction in methodology as preparation for visits to secondary school classrooms. Students must complete ten weekly half day experiences in the schools. A two week post session practicum may be required. This requirement may be modified for students on special programs. (Grading: INC; COM, N or F)

**ED-P 498 (1½) FOURTH YEAR SECONDARY SEMINAR**

A program of seminars and school experiences prerequisite to the secondary methodology courses. A two week post session practicum following final examinations is required. This requirement may be modified for students on special programs. (*Prerequisites:* 398 or permission of the Division; and authorization to register in the Faculty of Education or permission of the Education Advising Centre) (Grading: INC; COM, N, or F)

**ED-P 787 (4½) PROFESSIONAL YEAR ELEMENTARY SEMINAR  
AND PRACTICUM**

For students registered in the certification year, elementary program. Consists of a weekly seminar and school experience to be arranged by the School Experience Office. Initial school experiences will occur during the first week of the term. Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of Professional Studies. (Grading: INC; COM, N, F or INP)

**ED-P 797 (3) SEMINAR AND ELEMENTARY STUDENT TEACHING**

For students registered in the professional year, elementary program. Consists of a weekly seminar and school experience to be arranged by the School Experience Office. Initial school experiences will occur during the first week of the term. Students will be denied the practicum experience (fall or spring) if their preparatory work is considered unsatisfactory by the Dean. (Grading: INC; letter grade; INP)

**ED-P 798 (3) STUDENT TEACHING PRACTICUM**

Placement from January through April in one or more secondary schools for supervised teaching practice. (*Prerequisite:* Successful completion of pre-practicum term) (Grading: INC; COM, N, F, or INP)

**PROFESSIONAL COURSES****ED-P 496 (1½) SUPERVISION OF TEACHING**

An exploration of supervisory models and techniques for supervising teaching. This course is for certificated teachers and includes three weeks of practicum experience. (*Prerequisite:* Valid teaching certificate, 3 years experience and permission of Division)

**ED-P 497 (1½ or 3) PROFESSIONAL SEMINAR OR  
PRACTICUM (3.5 or 6.5 fee units)**

A seminar or supervised practicum for persons wishing to update teaching skills and to gain or validate teaching certificates. Practicum only students will be on an individualized study/practice program. (*Prerequisite:* Consent of the Education Advising Centre) (Grading: INC, COM, N or F)

**ED-P 777 (1½) INTRODUCTION TO TEACHING METHODS**

General introduction to curriculum and instruction in secondary school subjects. (Offered to internship students only.) (Grading: INC; COM, N or F)

**ED-P 780 (1½) STUDENT TEACHING SEMINAR — SECONDARY**

A series of seminars providing assistance in planning for practicum, discussion of topics of common concern for student teachers, and current issues related to instruction. (Grading: INC; COM, N, or F) (3-0)

**ED-P 789 (6) INTEGRATED PROGRAM IN ELEMENTARY  
CURRICULUM AND METHODOLOGY**

An integrated program in current curriculum developments and methods of instruction for elementary teachers who wish to update their professional training or for experienced secondary teachers who are considering teaching at the elementary level. Credit towards a degree may be used only for updating of professional training completed more than ten years previously. Credit for this course cannot be used for elective credit on a current degree program. A practicum may be required by the College of Teachers and/or the Faculty of Education. This is accommodated through an additional course and fees. (*Prerequisite:* Consent of the Education Advising Centre). (Lectures and laboratories: hours to be arranged; normally offered in Summer Session only) (Grading: INC; COM, N or F)

**ED-P 790 (1½) TEACHING SKILLS SEMINAR: SECONDARY**

The study, performance and evaluation of teaching skills essential to teacher performance at the secondary level. Skills will be practised and evaluated through peer interaction. (*Prerequisite:* Acceptance in the Secondary Post Degree Professional Program) (Grading: INC; COM, N or F) (3-0)

**ED-P 792 (½) SECONDARY CAREER SEMINAR**

Forum for discussion on teaching and general class management. (*Prerequisite:* Acceptance in a professional year) (Grading: INC; COM, N or F) (1-0)

**ED-P 793 (1½) INTERNSHIP SEMINAR**

Seminar on teaching competencies. Topics will include teaching skills, classroom management, relationship of theory to practice, analysis of teaching, the teacher as a professional, and education community orientation. (*Prerequisite:* Acceptance in a professional year) (Grading: INC; COM, N or F) (1-0)

**SPECIAL STUDIES**

Contact the Division Director for information.

**ED-P 494 (1½) and ED-P 495 (1½)****DIRECTED STUDIES (3.5 fee units)**

Research projects, directed reading, or additional course work in a specified area. (All students must obtain written approval from the Education Advising Centre before registering. Permission will not normally be given for more than three units of directed studies.)

494Y and 495Y Student Teaching

**ED-P 499 (½-3) PROFESSIONAL DEVELOPMENT —  
PROFESSIONAL STUDIES**

This is a variable content course directed at improving specific teacher and/or administrator competencies. It will normally be offered off campus. Not more than 3 units of credit for any 499 courses may be approved as electives on an education degree program. Approval must be obtained from the Education Advising Centre. (Grading: COM, N, or F)



# FACULTY OF ENGINEERING

James W. Provan, B.Sc. (Strathclyde), M.Sc., Ph.D. (Colo.), O.I.Q.,  
Dean of the Faculty  
Byron L. Ehle, A.B. (Whitman), M.S. (Stan.), Ph.D. (Wat.), Associate  
Dean  
Barry W. Brooks, B.Sc., M.Sc. (Calg.), P. Eng., Program Manager and  
Assistant to the Dean  
George Csanyi-Fritz, P.Eng., Faculty Engineer  
Gary F. Duncan, B.Sc. (U. of Vic.), M.Sc. (Tor.), Senior Programmer  
Analyst  
Susan Fiddler, B.Mus. (U. of Vic.), Cooperative Education Placement  
Coordinator  
Marilyn A. Kowalchuk, B.Sc., B.Sc.Eng. (Man.), P.Eng., Cooperative  
Education Coordinator  
Audrey L. McFarlane, B.Sc. (Man.), P.Eng., Cooperative Education  
Coordinator  
Andrea Toth, B.A. (Tor.), M.Sc. (Flor. Internat.), Cooperative Education  
Program Assistant  
Larry Varga, B.Eng. (U. of Vic.), Cooperative Education Coordinator

## 1.0 UNDERGRADUATE PROGRAMS

The Faculty of Engineering offers B.Eng. degrees in Electrical Engineering, Computer Engineering and Mechanical Engineering, and a B.Sc. degree in Computer Science.

Admission requirements and regulations are different for the B.Eng. and the B.Sc. degree programs and are described separately below. The Cooperative Education Program is mandatory for the B.Eng. degree programs and for the B.Sc. Computer Science (Business Option) program. Cooperative Education is optional for the other B.Sc. programs. The Cooperative Education Programs are described separately below.

## 2.0 BACHELOR OF ENGINEERING

### 2.1 APPLICATION FOR ADMISSION

The normal procedure is to admit students into the B.Eng. degree program to commence First Year Engineering in the September-December term each year.

Application forms for undergraduate admission to the B.Eng. degree program are available from Admission Services. Completed applications must be submitted to Admission Services not later than May 31. Applicants will receive written acknowledgement that their application for admission to the B.Eng. degree program has been received by Admission Services and confirmation that their admission file is complete.

### 2.2 INTERNATIONAL STUDENTS

The university has a primary obligation to permanent residents of Canada. Nevertheless, a limited number of international students may be admitted to the B.Eng. degree program.

### 2.3 RESTRICTIONS ON ADMISSION

There are restrictions on the number of students that can be admitted to First Year Engineering and to first and second years of the B.Eng. degree program. Achievement of the minimum academic requirements may not provide assurance of admission.

### 2.4 REQUIREMENTS FOR ADMISSION

Applicants for the B.Eng. degree program must meet the University of Victoria admission requirements as given under the heading Undergraduate Admission on pages 9-13. Additional admission requirements are given below.

Graduates of senior secondary schools in British Columbia require:

- 1) A grade of not less than B in Mathematics 12 (or Algebra 12) and Physics 12, and
- 2) Chemistry 11 or Chemistry 12.

Graduates of senior secondary schools in Canadian provinces other than British Columbia require equivalent qualifications in algebra, physics and chemistry to those specified above and are advised to

contact Admission Services for further information on recognition of their secondary school performance.

Applicants who have completed First Year Science at a university or college are eligible to be considered for admission.

B.C.I.T. and Camosun College students with two year Diplomas in Electronics or Mechanical Technology will be admitted to third year of a B.Eng. program on successful completion of the 6 month Engineering Bridge Program offered by Camosun College. Acceptance into this program is done on an individual basis and must be obtained from both the Faculty of Engineering and the College before registration in any of the Bridge courses will be approved. A limited number of mature applicants may be admitted notwithstanding the fact that they might not meet the minimum requirements for admission if, in the judgment of the Faculty, compensatory experience has been obtained.

In certain cases (see paragraph (e) of 2.7.4) a student may be registered in the Faculty of Engineering as a non degree candidate. Students with this status are permitted to take only a specified set of courses that will determine their qualification for entry into a degree program in Engineering.

### 2.5 READMISSION AFTER VOLUNTARY WITHDRAWAL

Students who have withdrawn voluntarily from the B.Eng. degree program and later reapply for admission must do so by the prescribed deadlines and will be considered in competition with all other applicants.

In the case of a student who would have had Probationary or Failed Standing if they had not withdrawn, the same requirements for clearing of failed grades and/or D grades will apply before readmission is considered. Students may be granted a non degree status admission to the Faculty for a period not exceeding 12 months for the purpose of clearing these marks.

### 2.6 CREDIT FOR COURSES TAKEN OUTSIDE OF THE PROGRAM

The Faculty of Engineering may grant credit to applicants to the B.Eng. degree program for courses taken at the University of Victoria or at other postsecondary educational institutions. Credit will be considered only for those courses that are equivalent to courses in the B.Eng. degree program and in which satisfactory performance has been achieved. For courses with prefixes ENGR, ELEC, CENG and MECH, detailed documentation supporting the credit request may be required and students should contact the Faculty's Undergraduate Office for specific instructions prior to beginning studies in the Faculty. Credit will not be granted in the B. Eng. programs for any courses for which a grade of less than C, or the equivalent was awarded and for some courses a higher minimum grade may be required.

### 2.7 REGULATIONS ON ACADEMIC PERFORMANCE

#### 2.7.1. Grading

The grading scheme used for the B.Eng. degree program is the same as that found under the heading General Information except for a somewhat different interpretation of the C, D and DEF grades.

A grade of C in a course implies that a satisfactory performance has been achieved.

A grade of D in a course implies that a weak but marginally acceptable performance has been achieved. While a D grade is a pass grade, an accumulation of D grades during a review period may lead to Probationary or Failed Standing.

A student may accumulate no more than eight (8) uncleared D grades in the B.Eng. program and still be eligible to graduate.

Grade DEF is used for courses in which a deferred examination has been granted on the basis of illness, family affliction or other similar circumstances. Please consult Section 2.7.5 of these regulations for B.Eng. degree program courses and the general University regulations for nonengineering courses.



### 2.7.2 Review of an Assigned Grade In Engineering Courses

- Any request for a review of a final grade must normally reach the Dean's office within 21 days after the release of assigned grades.
- The review of a final grade shall be restricted to grade components contributed by a final examination, and to any other grade components released to the student within the last 21 days before the end of classes.
- The grade determined by means of a review shall be recorded as the final official grade, irrespective of whether it is identical to, or higher or lower than, the original grade.

Prior to application, a student considering a request for a formal review should make every reasonable effort to discuss the assigned grade with the instructor. Mathematical marking errors will be rectified without recourse to the review procedures.

### 2.7.3 Academic Terms and Academic Years

The schedule for the B.Eng. degree program consists of eight academic terms (two per academic year) and six work terms.

The academic terms are scheduled from September to December (F), January to April (S), and May to August (K).

The timetable for academic terms and work terms is shown in Table I. The courses scheduled for each academic term appear under the heading ACADEMIC SCHEDULE associated with each Department.

Any deviations from this schedule require the written approval of the Dean of the Faculty.

Each student in a B.Eng. degree program will be assigned to a graduating class which at any point in time will determine the student's current academic term and/or work term for the purposes of other regulations.

TABLE I

| Year | September-December | January-April    | May-August       |
|------|--------------------|------------------|------------------|
| 1    | Academic Term 1A   | Academic Term 1B | Work Term W1     |
| 2    | Academic Term 2A   | Work Term W2     | Academic Term 2B |
| 3    | Work Term W3       | Academic Term 3A | Work Term W4     |
| 4    | Academic Term 3B   | Work Term W5     | Academic Term 4A |
| 5    | Work Term W6       | Academic Term 4B |                  |

### 2.7.4 Review of Academic Performance

The following regulations are in terms of grades in single term courses offered in the September-December, January-April or May-August term.

The academic standing of each student registered in the B.Eng. degree program will be reviewed at the end of the 1B, 2B, 3B, and 4B terms as determined by the student's 'graduating class'. Students will receive Satisfactory Standing, Probationary Standing or Failed Standing if they registered in at least four courses during the period under review.

Student performance is assessed on the basis of the grade point average and the number of grades of C or better accumulated over the review period.

The grade point average is calculated by adding the grade point values of all the grades awarded during the period under review and dividing the sum by the total number of grades. DEF grades will be excluded from the calculation. Grades obtained in supplemental examinations will be treated as additional grades and are included in the term in which they are assigned and appear on the student's record. Grades from the B.Eng. Management Option will not be included in either the standing calculation or graduation average.

The specific regulations for the B.Eng. degree program are as follows:

- Upon completion of an academic term in which the student registered for not less than four courses for the first time, that student may register for six courses in the following academic term, provided that a grade of C or better was achieved in each of at least two thirds of the grades awarded to the student. The required minimum number of grades of C or better is given in Table II.

Students who do not satisfy the above requirements will have their program determined by the Dean of Engineering.

- Student standings are defined as follows:

#### Satisfactory Standing

A grade point average of not less than 2.00 and a grade of C or better in each of at least two thirds of the grades awarded to the student during the period under review with no more than one uncles failing grade. The required minimum number of grades of C or better is given in Table II.

#### Probationary Standing

A grade of C or better in each of at least one half of the grades awarded to the student during the period under review with no more than two uncles failing grades. The required minimum number of grades of C or better is given in Table III.

#### Failed Standing

Failure to meet the criteria for Satisfactory or Probationary Standing or two consecutive assessments of Probationary Standing.

TABLE II

#### Minimum Requirements for Satisfactory Standing in the Faculty

|   |   |   |   |   |   |   |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| Number of Grades                        | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Minimum Number of Grades of C or Better | 3 | 4 | 4 | 5 | 6 | 6 | 7  | 8  | 8  | 9  | 10 | 10 | 11 |

Maximum Number of Uncleared Failing Grades: 1

TABLE III

#### Minimum Requirements for Probationary Standing in the Faculty

|   |   |   |   |   |   |   |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| Number of Grades                        | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Minimum Number of Grades of C or Better | 2 | 3 | 3 | 4 | 4 | 5 | 5  | 6  | 6  | 7  | 7  | 8  | 8  |

Maximum Number of Uncleared Failing Grades: 2

- Students with Satisfactory Standing may proceed in the program and must attempt to clear any uncles failing grade during the next reviewing period.
- Students with Probationary Standing may remain in the program for a period of up to one year subject to the following conditions:
  - They must repeat all courses for which D grades were obtained during the period under review.
  - They must not register for more than six courses per term.
  - They must achieve Satisfactory Standing at the time of the next review.
- Students with Failed Standing in the Faculty who would have either satisfactory or probationary standing in another UVic Faculty will be permitted to remain registered in the Faculty of Engineering for a period not exceeding 12 months with a non degree program status. (This status will normally be permitted only once for any given student during their registration in the Faculty.) Students with non degree program status in the Faculty will be permitted to repeat B.Eng. program courses for which they have D or failing grades but are not permitted to take any other B.Eng. courses during that time. Students with Failed Standing in the Faculty who also have University failed standing are required to withdraw from the University and will not be considered for readmission for at least one year.
- An application for readmission from a student who has previously been placed in Faculty non degree program status will be considered in open competition with other applicants for admission. On readmission, credit will not be granted for courses with grades of D taken during the review period immediately prior to being placed in the non degree status category or during the time the individual was registered as a non degree status student in the Faculty. Satisfactory Standing must be achieved at the next review or the student must withdraw from the Faculty.



- (g) An application for readmission from a student who has previously withdrawn will be considered in open competition with other applicants for admission. On readmission, credit will not be granted for courses taken with grades of D during the review period immediately prior to withdrawal, and Satisfactory Standing must be achieved at the next review or the student must withdraw from the Faculty. Students who have withdrawn from the Faculty will be permitted to repeat the B.Eng. courses for which they have D or failing grades and are not permitted to take any other B.Eng. courses during that time.

### 2.7.5 Deferred Examinations

- (a) Where a student has been unable to write an examination owing to illness, family affliction or other similar circumstances, the Faculty may authorize the writing of a deferred examination.
- (b) For the purpose of providing evidence to the Faculty as to the nature of illness and its effect on the student's ability to write an examination, the physician's medical report should be made on a form provided by the Faculty of Engineering, where possible. If this form is not used, the medical report should contain the information required by the Faculty of Engineering.

### 2.7.6 Supplemental Examinations

- (a) At the discretion of the Dean of Engineering, supplemental examination privileges in B.Eng. degree courses may be granted to students who would have achieved either Satisfactory or Probationary Standing, as defined in Section 2.7.4(b), during their academic work subsequent to the last academic review. The number of such examinations may not exceed one third of the courses taken by the student since the last review.
- (b) Students may apply to write a supplemental examination in a course only if they have written a final examination and have received a final grade of E in the course.
- (c) The grade of the supplemental examination shall replace only the grades of examinations and quizzes, and shall not compensate for or replace laboratory, project and assignment grades. A passing grade obtained as a result of completing a supplemental examination will be shown on the student's academic record with a grade point value of 1, corresponding to a D, and will be included as such in the calculation of the grade point average for review of academic performance at the University. However, for the purpose of academic review in the Faculty, the actual grade resulting from the completion of a supplemental examination together with the E grade that gave rise to the supplemental examination will be used.
- (d) A student who has failed to pass a specific course after a supplemental examination must repeat the course or replace it by an alternative course approved by the Dean of Engineering.
- (e) Applications for supplemental examination, accompanied by the necessary fees, must be received by the Dean's Office by the following dates:
- 1) For courses taken during the September-December term: February 15
  - 2) For courses taken during the January-April term: June 15
  - 3) For courses taken during the May-August term: October 15
- (f) Supplemental examinations are scheduled by the Faculty.

### 2.7.7 Equivalent Courses

Approval may be given, at the discretion of the Dean, for a student to replace one or more B.Eng. degree program courses by other acceptable courses. Written approval must be obtained in advance. Normally, such replacement courses will be taken at the University of Victoria.

An F grade in any course taken outside of the Faculty of Engineering may be cleared by passing another acceptable course, subject to the written approval of the Dean of Engineering.

### 2.7.8 Withdrawal from Courses

Students will not be permitted to withdraw from a given course more than once.

### 2.7.9 Graduation Requirements

Students are deemed to have satisfied the graduation requirements if the following are all satisfied:

- (a) they have completed successfully the full set of courses specified for the particular degree program with Satisfactory Standing;
- (b) they have completed successfully the requirements of the Engineering Cooperative Education Program;
- (c) they have no more than eight (8) uncleared D grades in the B.Eng. Program on their academic record.

### 2.7.10 Degree with Distinction

Students who obtain a grade point average of not less than 7.00 over the last two years of their program and have no failing grades and not more than two D grades over the last two years of their program will receive the B.Eng. degree with Distinction.

### 2.7.11 Dean's List

Students who complete their graduation requirements with Distinction shall be included in the Dean's Graduation List.

### 2.7.12 Special Provisions

Notwithstanding the above regulations, the Faculty shall exercise an equitable discretion in all cases so as to achieve fairness in the application of academic regulations.

## 2.8 ENGINEERING COOPERATIVE EDUCATION PROGRAM

Cooperative Education is mandatory in the B.Eng. degree program and, consequently, forms an integral part of the academic requirements for a B.Eng. degree. There are six work terms offered, according to the schedule shown in Table I of section 2.7.3. Each student is required to participate in a Work Term Preparation Workshop before beginning their first work term placement cycle.

The following regulations apply to the program:

1. The first work term (W1) is optional.
2. Normally, a student must pass all five of work terms W2-W6 in order to qualify for the B.Eng. degree. There are, however, several clearly defined exceptions to this rule.
  - (a) A student with extensive technical work experience (more than 12 months) may apply for credit for one (two if there is at least 24 months of experience in at least two different jobs) of the five required work terms.
  - (b) A student with recognized coop work terms from another certified post secondary institution may have them credited (max 2) toward the total of five required work terms if they have at least 12 units of academic credit which transfers from that institution towards the B.Eng. degree.
  - (c) A student transferring into the program with at least 9.0 units (all with grades of C or better) of university credits that are not creditable to the B.Eng. degree will be recognized as having completed equivalent work and will be granted a reduction of one of the five work terms.
  - (d) A student in the program who completes 9.0 units (all with grades of C or better) of university credits that are not creditable to the B.Eng. degree or who completes the B.Eng. Management Option will be recognized as having completed equivalent work and will be granted a reduction of one of the five work terms.
  - (e) The total number of work term course credits and/or reductions which can be obtained by the means outlined in sections (a) to (d) above will never be greater than two. The total number of work term course reductions which can be obtained based on academic credits will never be greater than one.

Students must apply in writing for all reductions and credits. Applications related to categories (a), (b) or (c) must be made at the time of initial registration in the B.Eng. program. Requests for reductions in (or credits toward) the required number of work terms for other reasons will be considered on a case by case basis.

3. The work term performance of each student will be assessed. A grade of COM, F or N will be assigned; COM is the passing grade.
4. Failure to pass a required work term will normally mean that the student must complete an additional work term to meet the graduation requirement.



In some instances, in order to fulfil the requirements for a B.Eng. degree, it may be necessary to complete work terms after all other academic requirements have been satisfied. The Faculty will endeavour to inform students within this category of this fact at their time of registration. Failure to do so, however, in no way obligates the Faculty to waive such work term requirements at a later date.

The Engineering Cooperative Education Coordinators are responsible for work placements, the evaluation of work term performance, and for the assignment of the work term grade.

The general regulations found in the Cooperative Education Programs section of the calendar also apply to B.Eng. degree program students. Where the Engineering regulations differ from the Cooperative Education regulations, the Engineering regulations shall apply.

## 2.9 REQUIREMENTS COMMON TO ALL BACHELOR OF ENGINEERING PROGRAMS

In areas not specifically addressed under the Bachelor of Engineering regulations, the standard University regulations found under General Information shall apply.

### 2.9.1 Engineering Academic Core

|           |  |
|-----------|--|
| CHEM 150  | Engineering Chemistry                          |
| C SC 110  | Fundamentals of Programming: I                 |
| C SC 160  | Fundamentals of Programming: II: for Engineers |
| C SC 349A | Numerical Analysis: I                          |
| ELEC 216  | Fundamentals of Electrical Engineering         |
| ELEC 250  | Linear Circuits: I                             |
| ENGR 150  | Engineering Graphics                           |
| ENGR 240  | Technical Writing                              |
| ENGR 280  | Engineering Economics                          |
| ENGR 297  | Technology and Society                         |
| ENGR 446  | Technical Report                               |
| ENGR 447* | Technology and the Individual                  |
| ENGR 498  | Engineering Law                                |
| ENGL 115  | College Composition                            |
| MATH 100  | Calculus: I                                    |
| MATH 101  | Calculus: II                                   |
| MATH 133  | Matrix Algebra for Engineers                   |
| MATH 200  | Calculus of Several Variables                  |
| MATH 201  | Introduction to Differential Equations         |
| STAT 254  | Probability and Statistics for Engineers       |
| PHYS 122  | Mechanics for Engineers                        |
| PHYS 125  | Fundamentals of Physics                        |

\* May be replaced by courses in humanities, social sciences, arts, management, engineering economics or communications at a challenging level, as required by CEAB guidelines for complementary studies, and as approved by the Faculty of Engineering's Program Committee. A current list of acceptable replacement courses may be obtained from the Undergraduate Office.

### 2.9.2 Work Term Preparation Workshop

To assist students in: their preparation of initial resumes and cover letters; development of positive interview techniques; skills assessment and analysis; work term report preparation; understanding national and international placement standards; and in methods for developing independent coop job contacts, the Faculty Coop Office offers a one hour per week non credit workshop from September to March. All first year students are required to participate in this workshop. A required but abbreviated version of the workshop is provided in the fall term for students transferring into the B.Eng. program at the second year.

## 2.10 B.ENG. MANAGEMENT OPTION

The courses required for this option are offered from January to April and will normally be taken after term 3B. Enrollment in the management option is limited. Students must apply for admission to this option before registration in any of its required courses. Applications are normally made in the first three weeks of term 3B.

The Management Option consists of the following courses:

|         |   |
|---------|---|
| COM 220 | Organizational Behaviour                            |
| COM 240 | Management Finance                                  |
| COM 250 | Fundamentals of Marketing                           |
| COM 270 | Financial and Management Accounting for Specialists |

plus one of:

|         |   |
|---------|---|
| ENT 302 | Introduction to Entrepreneurship          |
| IB 301  | The International Environment of Business |

all of which must be completed with a grade of D or better and collectively must be completed with an average grade of 2.0 or better.

Students who complete all requirements of a B.Eng. Program and those of the Management Option will receive their B.Eng. degrees in the appropriate Engineering specialization and their transcripts will bear the designation (Management Option). Students who fail to complete the requirements of the Management Option or elect not to enroll in this option, but otherwise complete all requirements of an Engineering program will receive their B.Eng. degrees without this designation on their transcripts. The regulations governing Management Option courses shall be the general university regulations and not those pertaining to the B.Eng. programs. Courses taken in the Management Option will have no effect on the standing status of students in the B.Eng. Program, but students failing to successfully complete the Management Option will still be required to complete at least five work terms unless exempted from such requirements by one of the other options spelled out in the Cooperative Program regulations for B.Eng. students given above.

## 3.0 BACHELOR OF SCIENCE

### 3.1 ADMISSION

The Faculty of Engineering offers Major and Honours programs in Computer Science and a Major program in Computer Science (Business Option), all of which lead to the B.Sc. degree.

Students who plan to pursue a program in Computer Science should apply to the Admissions Office of the University and should register in the Faculty of Arts and Science for the first year of their program.

Admission to the Major or Honours program in Computer Science may be granted only after completion of at least one year of studies in the Faculty of Arts and Science or equivalent studies. Admission to the Major program in Computer Science (Business Option) may be granted after the successful completion of 7½ units in the Faculty of Arts and Science or equivalent studies. Admission to these programs is subject to the requirements given in the Departmental entry below.

Application for admission to the Major or Honours program in Computer Science should be made no later than the beginning of the student's third year of studies. Application for admission to the Major in Computer Science (Business Option) should be made as soon as possible after the student is admitted to the University. Once admitted to the Major or Honours Degree programs in Computer Science or the Major program in Computer Science (Business Option), students register in the Faculty of Engineering. Students pursuing a General Degree program in Computer Science or a Combined Computer Science/Mathematics or Computer Science/Statistics degree program remain registered in the Faculty of Arts and Science.

### 3.2 ACADEMIC ADVICE

Students considering or enrolled in a General Computer Science or Combined Computer Science/Mathematics or Computer Science/Statistics degree program should seek academic advice from the Arts and Science Advising Centre or the Department of Computer Science. Students considering or enrolled in a Major or Honours Degree program in Computer Science should seek academic advice through the Computer Science Cooperative Education/Advising Office.

### 3.3 DEGREE REQUIREMENTS

Each candidate for a B.Sc. degree is required:

- to have satisfied the University English requirement;
- to include in the first 15 units presented for the degree not more than 9 units in Computer Science and at least 3 units from each of two other departments within the Faculties of Engineering or Arts and Science;
- to include in the next 15 units presented for the degree at least 3 units from a department in the Faculties of Engineering or Arts and Science other than Computer Science;
- to include in the remaining units presented for the degree at least 21 units of courses numbered at the 300 or 400 level (this is a general University regulation);



- (e) to satisfy the requirements of a Major or the Honours program in Computer Science as specified in the Department of Computer Science entry below;
- (f) to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 30 of these 60 units must normally be completed at this University;
- (g) to present no more than 6 units of free electives chosen without restriction from among all undergraduate course at this University (excluding Physical Education activity courses and School Experience or Practicum courses).

Additional regulations regarding the B.Sc. Honours program are located in the Department of Computer Science entry.

### 3.4 CREDIT FOR COURSES OFFERED BY OTHER FACULTIES

All courses offered by the Faculty of Arts and Science are recognized for credit for Major and Honours programs in Computer Science. In addition, courses offered by the Faculty of Fine Arts which are acceptable for credit in the Faculty of Arts and Science are acceptable for Major and Honours programs in Computer Science.

### 3.5 INTERFACULTY PROGRAMS

Students may arrange for an Interfaculty Double Honours or Major program through the Computer Science Coop/Advising Office. Such programs involve satisfying the Honours or Major requirements of two disciplines in two different Faculties. Agreement to details of all such programs must be signed by the student and by representatives of the academic units involved. Students undertaking an interfaculty program will be subject to the regulations of the Faculty in which they are registered.

Only one B.Sc. degree with a Double Major or a Double Honours or a Joint Major/Honours will be awarded on the recommendation of the Faculty in which the student is registered.

Students in a Major or Honours Program may also arrange to undertake a Minor in the Faculty of Arts and Science (see Minor, page 43).

### 3.6 COOPERATIVE EDUCATION PROGRAM

Please refer to page 38 of this calendar for a general description of Cooperative Education. Details of the Computer Science Cooperative Education program are given in the Department's entry.

### 3.7 CREDIT FOR STUDIES ELSEWHERE

Credit for work transferred from another institution is subject to the regulations on pages 12 and 18 of this calendar.

Students already enrolled in a B.Sc. degree program who plan to undertake work at other universities must receive prior written approval from the Department of Computer Science if they wish such courses to be credited towards the B.Sc. degree.

Students authorized to attend another university who accept a degree from that institution abrogate the right to a University of Victoria degree until they have satisfied the University's requirements for a second bachelor's degree (see page 23).

### 3.8 GRADUATION STANDING

The graduation standing for students in a B.Sc. Major degree program is determined in accordance with the University regulations on page 23. The graduation standing for students in a B.Sc. Honours degree program is determined in accordance with the regulations given below in the Department of Computer Science entry.

### 3.9 REGULATION ON ACADEMIC PERFORMANCE

Students in a B.Sc. degree program are subject to the University regulations on academic performance as stated in the academic regulations found on pages 17-23 of this calendar. In addition, a student graduating from any program offered by the Department of Computer Science in the Faculty of Engineering must present 60 units of credit that

- (i) satisfy the degree requirements, and
- (ii) contain no more than 8 D grades in those courses that have been completed at the University of Victoria. In this regard, if the same course has been satisfactorily completed more than once at this university, then the highest grade obtained is used.

Students are advised that enrollment in courses and degree programs may be limited by the availability of staff and resources.

Students who have not been admitted to the Faculty of Engineering will not be permitted to register in ENGR, CENG, ELEC or MECH courses except with the prior written permission of the Dean and will not be allowed to complete more than 6 units of such courses from outside the Faculty.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

## 4.0 GENERAL ENGINEERING COURSES

### ENGR 150 (formerly ENGR 100) (1½) ENGINEERING GRAPHICS

Basic principles of engineering drawing using Computer Aided Design and Drafting; orthographics projections; multiple view drawings, dimensioning, tolerancing, sectional views; theory of projections for isometric, oblique and perspective pictorial views; computer representation of physical shapes; algorithms for 2-D and 3-D transformations; computation of surface characteristics for data visualization. (Prerequisite: C SC 160 which may be taken concurrently) FS(3-2)

### ENGR 240 (1½) TECHNICAL WRITING

This course will focus on searching and referencing methods used in dealing with scientific and technical literature and on the characteristics of effective technical and scientific style. The emphasis throughout will be on clarity, precision, and consistency. Students will acquire practical experience in the writing of short technical documents such as memoranda, letters and abstracts, longer forms such as reports, papers, and theses, and instructional forms such as manuals, brochures, and specifications. (Prerequisite: ENGL 115) FS(3-0)

### ENGR 280 (1½) ENGINEERING ECONOMICS

Macroeconomic principles: money, interest rates, growth. Microeconomic principles: demand and supply, production, consumer utility and elasticity. Net present value, equivalence, rate of return. Public vs private sector cost-benefit analysis, externalities, risk and uncertainty. Industry and innovation life cycles. (Prerequisites: MATH 133 and 200 and STAT 254 which may be taken concurrently) K(3-0-1)

### ENGR 297 (formerly ENGR 497) (1½) TECHNOLOGY AND SOCIETY

This course introduces the student to the effects of technology on society. The ethical, environmental, economic and political issues raised by technological change will be emphasized. (Credit will not be given for both 297 and 497) (Prerequisite: Completion of term 2A) K(3-0)

### ENGR 446 (1) TECHNICAL REPORT

All students in the B.Eng. programs must submit a technical report on entering their final term. The preparation of this report will provide students with an opportunity to demonstrate their written communication skills. The report topic must be approved by an Engineering Coop Coordinator at least 2 months prior to submission, and the letter of approval must accompany the report. The report must be prepared according to the Work Term Report Guidelines in effect at the time of the topic submission. The report must be submitted to the Engineering Cooperative Education Office by the first day of classes of the Spring term. (Prerequisites: 240, and completion of term 4A) Y

### ENGR 447 (1½) TECHNOLOGY AND THE INDIVIDUAL

This course introduces the student to the interaction between the person and technology. The psychological effects of technology on the person's behavior, values and well being will be considered, as will human efforts to adapt machines to individuals. The impact of technological development on the family, the community and the organization will be assessed. (Prerequisite: Completion of terms 1A to 3B) K or S(3-0)

### ENGR 498 (1½) ENGINEERING LAW

Sources and classification of law; professional engineering legislation, registration and discipline; introduction to tort law including negligence; introduction to contract law including employment law. Ethics in professional practice. (Prerequisite: Completion of terms 1A to 3B) K or S(3-0)



## DEPARTMENT OF COMPUTER SCIENCE

D. Michael Miller, B.Sc. (Winn.), M.Sc., Ph.D. (Man.), Professor and Chair of the Department

R. Nigel Horspool, B.A. (Cantab.), M.Sc., Ph.D. (Tor.), Professor

Eric G. Manning, B.Sc., M.Sc. (Wat.), Ph.D. (Ill.), F.I.E.E.E., P. Eng., Professor

Jon C. Muzio, B.Sc., Ph.D. (Nott.), Professor

D. Dale Olesky, B.Sc., M.Sc. (Alta.), Ph.D. (Tor.), Professor

Frank Ruskey, B.A., M.A., Ph.D. (Calif., San Diego), Professor

Maarten van Emden, M.Sc. (Technische Hogeschool), Ph.D. (Amsterdam), Professor

William W. Wadge, B.A. (Brit. Col.), Ph.D. (Calif.-Berk.), Professor

Byron L. Ehle, A.B. (Whitman), M.S. (Stan.), Ph.D. (Wat.), Associate Professor

John A. Ellis, B.Sc., M.Sc. (Lond.), M.S. (Ill. Inst. of Tech.), Ph.D. (Northw.), Associate Professor

Michael R. Fellows, B.A. (Sonoma St.), M.A., Ph.D. (Calif. - San Diego), Associate Professor

Daniel M. Hoffman, B.A. (S.U.N.Y.), M.S., Ph.D. (N. Car., Chapel Hill), Associate Professor

Michael R. Levy, B.Sc., M.Sc., (Witw.), Ph.D. (Wat.), Associate Professor

Hans A. Müller, M.S., Ph.D. (Rice), Associate Professor

Frank D.K. Roberts, M.A. (Cantab.), M.Sc., Ph.D. (Liv.), Associate Professor

Micaela Serra, B.Sc. (Man.), M.Sc., Ph.D. (U. of Vic.), Associate Professor

Gholamali C. Shoja, B.S.E.E. (Kan. St.), M.S.E.E. (Northw.), D. Phil. (Sus.), Associate Professor

Mantis H.M. Cheng, B.Math., M.Math., Ph.D. (Wat.), Assistant Professor

Bruce Kapron, B.Math. (Wat.), M.Sc. (S. Fraser), Ph.D. (Tor.), Assistant Professor

Valerie King, A.B. (Prin.), J.D., Ph.D. (Calif., Berk.), Assistant Professor

Wendy J. Myrvold, B.Sc. (McG.), M.Math., Ph.D. (Wat.), Assistant Professor

Peter A. Walsh, B.Sc., M.Sc. (U. Coll. of Cork), Ph.D. (U. of Vic.), Senior Instructor

Glen C. Darling, B.Sc. (U. of Vic.), Senior Laboratory Instructor

Marilee V. Garrett, B.A. (Brown), M.Sc. (U. of Vic.), Cooperative Education Coordinator (Computer Science and Mathematics)

Helen Graham, B.A. (U. of Vic.), Administrative Officer

E. Alan Idler, B.Sc. (Brit. Col.), M.Sc. (U. of Vic.), Senior Scientific Assistant

Megan Jameson, B.A. (U. of Vic.), Program Assistant, Cooperative Education Program

William Kastelic, B.Sc., M.Sc. (S. Fraser), Programmer Analyst

### Visiting, Adjunct and Cross-listed Appointments:

Ian Barrodale, B.Sc. (Wales), M.A. (Brit. Col.), Ph.D. (Liv.), Adjunct Professor (1994-96)

Albert G. Buckley, B.Sc. (Calg.), M.Sc. (Alta.), Ph.D. (Brit. Col.), Adjunct Professor (1993-95)

Maurice Danard, B.A. (Brit. Col.), M.A. (Tor.), Ph.D. (Chic.), Adjunct Professor (1994-96)

David G. Goodenough, B.Sc. (Brit. Col.), M.Sc., Ph.D. (Tor.), Adjunct Professor (1994-96)

G. M. Frits Swinkels, B.S., M.Sc. (Delft), M.Sc. (S. Fraser), Ph.D. (Queen's), Adjunct Professor (1994-96)

W. Andrew Schloss, B.A. (Bennington Coll.), Ph.D. (Stan.), Associate Professor (Music) (1993-95)

Dominique Roelants Van Baronaigien, B.Sc., M.Sc., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1994-96)

## 1.0 PROGRAMS

The Department of Computer Science offers programs of study leading to the following degrees:

- Faculty of Engineering: B.Sc. Major or Honours in Computer Science; B.Sc. Major in Computer Science (Business Option);

- Faculty of Arts and Science: B.Sc. Major or Honours in Combined Computer Science and Mathematics and Computer Science and Statistics; B.A. or B.Sc. General Degree in Computer Science; for details see page 68.

- Faculty of Graduate Studies: M.A., M.Sc., Ph.D.

For details of graduate programs in Computer Science, see page 309.

## 2.0 LIMITATION OF ENROLLMENT

Students are advised that, because of limited facilities and staff it may be necessary to limit enrollment in certain Computer Science courses. Enrollment in Computer Science 100, 110, 115 and 200 will be on a first come, first served basis. Enrollment limits in all other courses will be imposed where necessary on the basis of the facilities available and academic standing in prerequisite courses. Students with a B- or higher grade in prerequisite courses will, in most instances, have no difficulty gaining admission to subsequent courses.

Entry to the Major degree program in Computer Science (Business Option) is limited. Students interested in this program are advised to consult the Computer Science Coop/Advising Office early in their first year of studies. Selection of students for entry to the program will be based on the grade point average in required courses.

## 3.0 UNDERGRADUATE PROGRAMS

Undergraduate courses offered by the Department of Computer Science may be taken by all students in the Faculty of Arts and Science for full credit toward a degree in that Faculty.

All first year students wishing to complete a degree in Computer Science register in the Faculty of Arts and Science. Students planning to complete a Major or Honours degree in Computer Science register in the Faculty of Engineering upon declaring their degree program. Students planning to complete one of the Combined degree programs offered by Computer Science and Mathematics and Statistics, or a General program involving Computer Science, continue to be registered in the Faculty of Arts and Science. Students planning to complete a double Major or double Honours degree in Computer Science and another discipline can choose to register in the Faculty of Engineering or the faculty of the other discipline.

Students planning to complete a Major degree in Computer Science (Business Option) should consult the Computer Science Coop/Advising Office before completion of their first term of studies. All students planning to complete other degrees with a Computer Science designation must file a Record of Degree Program form before registering for third year in the Faculty of Engineering or during the third year in the case of the Faculty of Arts and Science. For the Faculty of Arts and Science, Degree Programs are submitted to the Arts and Science Advising Centre. For the Faculty of Engineering, Computer Science Degree Programs are submitted to the Computer Science Coop/Advising Office.

## 4.0 MAJOR AND HONOURS PROGRAMS:

### 4.1 ADMISSION TO HONOURS

Students who wish to be admitted to the Honours program should apply in writing to the Chair of the Department on completion of their second year. Normally a student will be admitted to the Honours program only if the student meets the following conditions: completion of 110, 115, 212, 225, 230 and 265; completion of at least 10½ units of the Mathematics and Statistics courses required for the degree; attainment of an overall grade point average in second year of at least 6.50; and attainment of a grade of B+ or higher in each 200 level Computer Science course completed. Students may be admitted to the Honours Program upon completion of their third year providing

- they have completed all of the 100 level and 200 level courses required for the Honours degree with a grade point average of at least 6.00 in these courses, and
- they have completed at least 9 units of 300 level courses in Computer Science (including 320, 322 and 360) and have obtained a grade point average of at least 6.50 over all 300 level Computer Science courses taken.



Honours students who do not obtain a grade point average of at least 6.00 in the seven required 300 level Computer Science courses must withdraw from the Program.

A student graduating in the Honours Program will be recommended for an Honours degree with Distinction if the student has achieved at least a 6.50 graduating average and an average of at least 6.50 in courses numbered 300 or higher taken in the Department. A student who completes the Honours degree requirements without attaining the 6.50 standing but has a departmental and graduating average of at least 5.00 will be recommended for an Honours degree.

## 4.2 MAJOR AND HONOURS: COMPUTER SCIENCE

| Year | B.Sc. Major                     |       | B.Sc. Honours                   |       |
|------|---------------------------------|-------|---------------------------------|-------|
| I    | C SC 110/115                    | (3)   | C SC 110/115                    | (3)   |
|      | MATH 100/101/224                | (4½)  | MATH 100/101/224                | (4½)  |
|      | ENGL 115, ENGR 240 <sup>1</sup> | (3)   | ENGL 115, ENGR 240 <sup>1</sup> | (3)   |
|      | Electives                       | (4½)  | Electives                       | (4½)  |
| II   | C SC 212/225/230/265            | (6)   | C SC 212/225/230/265            | (6)   |
|      | MATH 201/233A/324               | (4½)  | MATH 200/201/233A/              |       |
|      | Electives                       | (4½)  | 233C/324                        | (7½)  |
|      |                                 |       | Electives                       | (1½)  |
| III  | C SC 320/330/355/               |       | C SC 320/322/326/               |       |
|      | 360/370                         | (7½)  | 330/349A/355/360/               |       |
|      | C SC 340 or 349A                | (1½)  | 365/370                         | (13½) |
|      | STAT 260 <sup>2</sup>           | (1½)  | STAT 260 <sup>2</sup>           | (1½)  |
|      | Other Courses <sup>3</sup>      | (4½)  |                                 |       |
| IV   | 4½ units of C SC at             |       | C SC 499                        | (1½)  |
|      | the 400 level                   | (4½)  | 9 units of C SC at              |       |
|      | Other Courses <sup>3</sup>      | (10½) | the 400 level                   | (9)   |
|      |                                 |       | Electives                       | (4½)  |

<sup>1</sup> ENGL 225 can be substituted for ENGR 240 but this requires 3 units of first year English.

<sup>2</sup> STAT 260 may be taken as early as the second term of the first year.

<sup>3</sup> These 15 units of other courses must include at least 1½ units of Computer Science at the 300 level or above.

### 4.2.1 Area of Emphasis

As an option, a student undertaking a B.Sc. Major or B.Sc. Honours program in Computer Science may elect courses to emphasize a particular area of study. The selected area of emphasis is to be identified on the Record of Degree Program filed with the Computer Science Cooperative Education/Advising Office.

For the B.Sc. Major program, the area of emphasis will be recorded on the student's final transcript provided the student successfully completes at least 4½ units (at least 3 at the 400 level) from one area selected from the list given below. For the B.Sc. Honours program, the area of emphasis will be recorded on the student's final transcript provided the student successfully completes at least 6 units (at least 4½ at the 400 level) from one area selected from the list given below. Honours students are strongly encouraged to select a Technical Project from their chosen area of emphasis.

To establish a breadth of knowledge in Computer Science, students are strongly encouraged to select at least 1½ units from each of three of the areas listed.

### 4.2.2 Areas of Emphasis:

#### A: Algorithms

- 322 Logic and Programming
- 405 Computer Graphics
- 425 Analysis of Algorithms
- 426 Computational Geometry
- 445 Operations Research: Linear Programming
- 482 Topics in Algorithms

#### B: Programming Methodology

- 322 Logic and Programming
- 365 Software Engineering
- 375 Introduction to Systems Analysis
- 435 Compiler Construction
- 465 Advanced Software Engineering
- 483 Topics in Programming Methodology

#### C: Scientific Computing

- 349B Numerical Analysis II
- 445 Operations Research: Linear Programming
- 446 Operations Research: Simulation
- 449 Numerical Linear Algebra
- 484 Topics in Scientific Computing

#### D: Systems

- 350 Computer Architecture
- 435 Compiler Construction
- 450 Computer Communications and Networks
- 454 Fault Tolerant Computing
- 460 Design and Analysis of Real-Time Systems
- 485 Topics in Systems

## 4.3 MAJOR: COMPUTER SCIENCE (BUSINESS OPTION)

This program is intended for students who wish to supplement studies in Computer Science with studies in Business. Entry to the program is limited. Students must be admitted to the program prior to registering in any Business courses. Information on eligibility and application to the program is available from the Computer Science Coop/Advising Office. This is a mandatory Coop program.

### Year

|     |  |      |
|-----|--|------|
| I   | C SC 110/115                             | (3)  |
|     | MATH 100/101/224                         | (4½) |
|     | ENGL 115, ENGR 240 <sup>1</sup>          | (3)  |
|     | ECON 201/202                             | (3)  |
|     | Electives                                | (1½) |
| II  | C SC 212/225/230/265                     | (6)  |
|     | MATH 201/233A                            | (3)  |
|     | COM 220/240/250/270                      | (6)  |
| III | C SC 320/360/365/370/375                 | (7½) |
|     | C SC 340 or 349A                         | (1½) |
|     | STAT 260 <sup>2</sup> /MATH 242          | (3)  |
|     | COM 340, one of ENT 302, TRM 301, IB 301 | (3)  |
| IV  | 3 units of C SC at the 400 level         | (3)  |
|     | 3 units of Business at the 300/400 level | (3)  |
|     | Other Courses <sup>3</sup>               | (9)  |

<sup>1</sup> ENGL 225 can be substituted for ENGR 240 but this requires 3 units of first year English.

<sup>2</sup> STAT 260 can be taken as early as the second term of the first year.

<sup>3</sup> These 9 units of other courses must include at least 3 units of Computer Science or Business at the 300 level or higher.

## 4.4 NOTES:

- (1) All students taking a degree in Computer Science are strongly advised to take some University courses outside the Computer Science and Mathematics and Statistics Departments.
- (2) Any students who demonstrate to the Department that they have mastered the material of a course may be granted advanced placement.
- (3) Students from outside British Columbia, students transferring from community colleges and students who have obtained credit for Grade XIII Mathematics must consult the Department before enrolling in any Computer Science course.
- (4) In each line below students may obtain credit for only one Computer Science course.

112 or 212  
115 or 160  
250 or 355  
370 or 470  
425 or 420  
435 or 471  
448A or 445  
448B or 446



## 5.0 GENERAL PROGRAM AND COMBINED PROGRAMS IN COMPUTER SCIENCE AND MATHEMATICS

Requirements for these programs are located in the Computer Science entry in the Faculty of Arts and Science section of this calendar.

## 6.0 COMPUTER SCIENCE COOPERATIVE EDUCATION PROGRAMS

### 6.1 GENERAL REGULATIONS

The minimum academic requirements for entering one of the Cooperative Education Programs offered by the Department are a grade point average of 4.50, a minimum grade point average of 5.50 in courses completed in the Departments of Computer Science and Mathematics and Statistics, and a grade of at least B- in each course completed in the Departments of Computer Science and Mathematics and Statistics.

Students are normally admitted to a program in January after their first term on campus and application for admission should be made before the end of the first term. However, under exceptional circumstances, a student may be admitted to a program up to the end of his or her second year.

Students registered in a Coop Program must be enrolled in at least 6 units of course work during each Campus Term. The performance of students will be reviewed after each Campus Term and each Work Term. Students whose performance is deemed to be unsatisfactory may be required to withdraw from the Program.

Each Work Term is recorded on the student's academic record and transcript (as COM, N or F) and details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

Further information concerning the Cooperative Education Program may be obtained from the Department.

### 6.2 COMPUTER SCIENCE/MATHEMATICS COOP

Students in the Major or Honours program in Computer Science who are admitted to the Cooperative Education Program participate in a combined Computer Science/Mathematics Coop Program in their first two years. In the third year they may opt to complete a degree program in either Computer Science or Mathematics and Statistics and will enter the Coop program in that department. Students who opt for the Major or Honours in Combined Computer Science and Mathematics/Computer Science and Statistics, or for a Double Major or Double Honours in Computer Science and Mathematics, or Computer Science and Statistics, will remain in the Combined Computer Science/Mathematics Coop.

In order to graduate in the Computer Science or Combined Computer Science and Mathematics Cooperative Program, students normally must successfully complete a minimum of five Work Terms (the granting of Work Term credit by challenge is not permitted), and satisfy the course requirements of their specific degree program.

### 6.3 COMPUTER SCIENCE (BUSINESS OPTION)

Students admitted to the Major Program in Computer Science (Business Option) are required to take part in the Cooperative Education Program. In addition to completing their degree requirements, in order to graduate in this program they must complete at least five Work Terms and be enrolled in a minimum of 6 units of course work each Campus Term.

## 7.0 COMPUTER SCIENCE COURSES

**Prerequisites** C SC 112, or its equivalent, completed prior to September 1996 will be accepted in place of C SC 212. C SC 112 and 275, or their equivalents, completed prior to September 1996 will be accepted in place of C SC 265. Under exceptional circumstances, course prerequisites may be waived by the Department.

### C SC 100 (1½) ELEMENTARY COMPUTING

An introduction to computing for the nonspecialist. Topics covered include the basic structure of a digital computer system; applications of computers in the home, office and industry; and implications of computers for society. Hands-on experience with a microcomputer and the

use of some practical software packages are given. (*Prerequisite:* Mathematics 11) (NOTE: This course is designed for a general university audience; students intending to Major in Computer Science should enroll in 110 rather than 100.) (Not open to students with credit in any of Computer Science 12, 105, 110, 112, or equivalent. Normally not open to students with credit in Computer Studies 11) FS(2-2)

### C SC 105 (1½) COMPUTERS AND INFORMATION PROCESSING

An introduction to business computing. Topics covered include the basic structure of digital computer systems, microcomputers, word processing, spreadsheets, database systems, communications, networks and introductory programming. In the laboratory, students will receive hands on experience with microcomputers and software packages for business applications. (*Prerequisite:* Mathematics 12) (NOTE: This course is intended primarily for students in the Business School or Economics. Students who have completed or are currently registered in ECON 201 and ECON 202 will be given priority. Other students will be admitted on an availability basis.) (NOTE: Not for credit to students in a Major or Honours program in Computer Science or Computer Science/Mathematics or Computer Science/Statistics) (Not open to students with credit in HINF 161 or 162, or C SC 112) FS(2-2)

### C SC 110 (1½) FUNDAMENTALS OF PROGRAMMING: I

Introduction to designing, implementing, and understanding computer programs using an imperative programming language. Topics include overview of computers and software, introduction to computing and problem solving, fundamental elements of imperative programming languages, top-down design and stepwise refinement. (*Prerequisite:* Mathematics 12) FS(3-1)

### C SC 115 (1½) FUNDAMENTALS OF PROGRAMMING: II

Techniques, methods, and tools for systematic development and maintenance of software systems and documentation; basic algorithms and data structures; and fundamental concepts of object-oriented programming. Topics include control and data abstraction, modularization, abstract data types, layers of abstraction, information hiding, separation of concerns, type checking, program design, separate compilation, software libraries, techniques for the development of high-quality software components, program understanding. (*Prerequisite:* 110) FS(3-1)

### C SC 160 (1½) FUNDAMENTALS OF PROGRAMMING: II FOR ENGINEERS

Techniques, methods, and tools for systematic development and maintenance of software systems and documentation; basic algorithms and data structures; and fundamental concepts of object-oriented programming. Topics include control and data abstraction, modularization, abstract data types, layers of abstraction, information hiding, separation of concerns, type checking, program design, separate compilation, software libraries, techniques for the development of high-quality software components, program understanding. Selected scientific and engineering examples will be used to illustrate the application of the concepts presented. (*Prerequisites:* 110, MATH 100, and admission to a B.Eng. program) S(3-1)

### C SC 200 (1½) COMPUTERS IN STATISTICAL APPLICATIONS

Tools needed for scientific data analysis, statistical testing, and graphical displays for the nonspecialist computer user. Statistical packages including SPSS-X and SAS will be introduced. The student will learn to use plotting packages e.g., SAS/GRAPH. Students are assumed to have a working knowledge of univariate statistics. Analysis of variance and single and multi-variate regression will be introduced. (*Prerequisites:* One of ANTH 317, BIOL 250, ECON 245, GEOG 321, STAT 252, 255, 260, PSYC 300A, SOCI 371) (NOTE: Not for credit to students in a Major or Honours program in Computer Science or Computer Science/Mathematics or Computer Science/Statistics) F(2-1½)

### C SC 212 (formerly 112) (1½) THE PRACTICE OF COMPUTER SCIENCE

A survey of aspects of the application of Computer Science. Topics: hardware and software design including logic design, basic computer organization and system software; programming paradigms; external storage, sequential file processing and elementary relational databases; networks and electronic information services; artificial intelligence; ethical and societal considerations. (*Prerequisite:* 110) FS(3-1)



**C SC 225 (1½) ALGORITHMS AND DATA STRUCTURES: I**

An introduction to algorithm design and analysis. Random access machine model. Time and space complexity, average and worst case analysis, upper and lower bounds. Application of correctness proof techniques. Algorithms: internal searching, merging, sorting, selection, hashing; graphs: traversals, topological sort, transitive closure, strongly connected components, shortest path, minimum spanning tree. The existence of intractable problems, heuristics. Data structures: B-trees, heaps and graphs. (Prerequisites: 115 or 160, and effective 96/97 - MATH 224 or CENG 245) FSK(3-1)

**C SC 230 (1½) COMPUTER ARCHITECTURE AND ASSEMBLY LANGUAGE**

Basic architecture of computer systems including fundamental concepts such as register structure, memory organization and management, organization of peripherals, and machine-level operations. These concepts are integrated through the use of an assembly language and the operation of assemblers, linkers and loaders. Topics covered include: instruction sets, symbolic addressing, bus organization, instruction fetch and execution, read/write cycles, interrupt processing, I/O processing, general microprocessor design. (Prerequisites: 115 or 160) FSK(3-1)

**C SC 265 (1½) SOFTWARE ENGINEERING: I**

Tools and techniques to promote programming productivity and software quality. Topics include specifications, code review and inspection techniques, testing and debugging methods and tools, reusable software components and templates, file system navigation, scripting languages, software configuration management, software tools, environments, and instrumenting and profiling. (Prerequisite: 115 or 160) FSK(3-1)

**C SC 320 (1½) FOUNDATIONS OF COMPUTER SCIENCE**

A survey of formal models and results that form the theoretical foundations of computer science; typical topics include finite automata, Turing machines, simple undecidable problems, context free languages and elementary computational complexity. (Prerequisites: 225, and MATH 222 or 224) FK(3-0)

**C SC 322 (1½) LOGIC AND PROGRAMMING**

Practical applications of logic in computer science and its relevance in such areas as software engineering, artificial intelligence and circuit design theory. Topics discussed will include the following: propositional expressions and circuits, reading and writing first order logic, predicate logic as a relational query language, knowledge representation, PROLOG, and other related topics. (Prerequisites: 115 or 160; MATH 224 or CENG 245 or PHIL 203 or 304A) F(3-0)

**C SC 326 (1½) ALGORITHMS AND DATA STRUCTURES: II**

Amortised time complexity, lower bound arguments, matrix operations, disjoint set operations, string matching, graph algorithms: shortest path, minimum spanning tree, network flow. Intractable problems, approximate solutions. Data structures: disjoint set, priority queue, balanced trees. Techniques: divide and conquer, dynamic programming, greedy, branch and bound. (Prerequisites: 225 and MATH 324) S(3-0)

**C SC 330 (1½) PROGRAMMING LANGUAGES**

The fundamental concepts of imperative and applicative programming languages. Topics include the description of data types, variable assignment and sharing; sequencing; iteration and recursion; parameter passing mechanisms; and type checking. Students will develop interpreters which implement some of the language features listed above. (Prerequisites: 212, 225, 230, and 265) SK(3-0)

**C SC 340 (1½) NUMERICAL METHODS**

The study of computational methods for solving problems in linear algebra, nonlinear equations, approximation, and ordinary differential equations. The student will write programs in a suitable high level language to solve problems in some of the areas listed above but the course will also teach the student how to use mathematical subroutine packages currently available in computer libraries. (Prerequisites: 115 or 160; MATH 233A and 201) (NOTE: Not open to students with credit in 349A or equivalent) F(3-0)

**C SC 349A (1½) NUMERICAL ANALYSIS: I**

An introduction to selected topics in Numerical Analysis. Typical areas covered: error analysis, roots of equations, systems of linear equations, linear programming, interpolation, numerical integration, and ordinary differential equations. (Prerequisites: 115 or 160, and MATH 200, 201, and either 233A or 133) (NOTE: Not open to students with credit in 340 or equivalent) FS(3-0)

**C SC 349B (1½) NUMERICAL ANALYSIS: II**

An introduction to selected topics in Numerical Analysis. Typical areas covered: ordinary differential equations, numerical differentiation, approximation of functions, iterative methods for linear equations, eigenvalues and eigenvectors, systems of nonlinear equations, boundary-value problems and partial differential equations. (Prerequisites: 349A; or MATH 200 and a grade of B or higher in C SC 340) S(3-0)

**C SC 350 (1½) COMPUTER ARCHITECTURE**

This course will introduce the basic building blocks of a general purpose computer with emphasis on techniques for speed and performance enhancement. Topics will include: central processor organization, arithmetic algorithms, lookahead and parallelism, memory hierarchy, control unit and microprogramming, input output devices, case studies of some recent micro, mini, and mainframe computers. (Prerequisites: 225, 230, and 250 or 355) S(3-0)

**C SC 355 (formerly 250) (1½) DIGITAL LOGIC AND COMPUTER ORGANIZATION**

The fundamentals of logic design, computer organization and the structure of major hardware components of computers. The course discusses the application of Boolean algebra to switching circuits, and the use of MSI, LSI and field programmable devices in digital design. Topics include combinational and sequential circuits, flip-flops, counters, memory organization, buses and arithmetic units, CAD tools for logic design, and an introduction to system level digital design. Hardware aspects of computer networks are introduced. (Prerequisites: 212, 230, and MATH 224) FS(3-2)

**C SC 360 (1½) INTRODUCTION TO OPERATING SYSTEMS**

An introduction to the major concepts of operating systems and study of the interrelationships between the operating system and the architecture of computer systems. Topics discussed include operating system structures, concurrent programming techniques, cpu scheduling, deadlocks, memory management, file systems and protection. (Prerequisites: 225 and 230, 265 or registration in the Comp.Eng. degree program) FK(3-1)

**C SC 365 (1½) SOFTWARE ENGINEERING: II**

Techniques for the development and maintenance of software systems are described. The life cycle approach to software and the characteristics of life cycle products are included. The course covers material in requirements definition, specification, design, program testing and verification and validation. Contemporary and future software development environments are studied. (Prerequisites: 225; 265 or 360; and third year standing) FSK(3-2)

**C SC 370 (formerly 470) (1½) DATABASE SYSTEMS**

An introduction to the use and operating principles of database management systems. Topics to be covered include: data entities and relationships; data modeling using Entity-Relation Diagrams: hierarchical, network and relational models of databases; query languages; physical representation of data in secondary storage; relational algebra and calculus as applied to the design of databases; security and integrity in the context of concurrent use; and basic ethical issues associated with database design and use. (Prerequisites: 212, 225 and 265. Not open to students with credit in HINF 300) FS(3-0)

**C SC 375 (1½) INTRODUCTION TO SYSTEMS ANALYSIS**

This course introduces the student to many of the techniques used in analyzing a business data processing system. Topics discussed will include the following: project definition, preliminary design, man-machine interface, data gathering and analysis, data base design, system controls, hardware selection, and system testing, implementation and operation. Students will be assigned to a project team involved in a system study as part of the course. (Prerequisites: 265; 212 or HINF 172) FS(3-0)



**C SC 390 (6-7½) C SC EXCHANGE TERM**

Where the Department has entered into an exchange agreement with another Department in Canada or elsewhere, students may register in this course for up to 7.5 units each term towards their degree at the University of Victoria. The terms and conditions of a student's enrollment in an exchange term, the number of units of credit authorized, and the requirements for successful completion of the term are governed by the regulations adopted by the Department. Permission of the Chair is required. This course can be taken twice. (Grading: COM, N, or F)

FSK

**C SC 405 (1½) COMPUTER GRAPHICS**

The fundamental algorithms and data structures used in generative computer graphics. Topics discussed include structure of interactive graphics programs, raster algorithms, colour, two dimensional and three dimensional geometric transformations, animation, parallel and perspective projection, hidden line and hidden surface algorithms, cubic curves and surfaces, and shading models. Students will use high resolution raster display workstations, and other graphical devices. (*Prerequisites*: 225, MATH 133 or 233A, and 3 units of 300 level Computer Science)

SK(3-0)

**C SC 425 (formerly 420) (1½) ANALYSIS OF ALGORITHMS**

General techniques for designing and analyzing algorithms; an in depth examination of several problems and algorithms with respect to their time and space requirements; advanced data structures; sorting and searching; graph algorithms; backtracking; NP-complete problems; approximation algorithms. (*Prerequisites*: 225 and 320 and MATH 324)

F(3-0)

**C SC 426 (1½) COMPUTATIONAL GEOMETRY**

Algorithms and data structures that are used to solve geometrical problems. Topics include geometric searching, convex polygons and hulls, Voronoi diagrams, plane sweep algorithms, proximity, and intersections. Application areas which are discussed include: computer graphics, VLSI design, and graph theory. (*Prerequisites*: 225 and 4th year standing)

S(3-0)

**C SC 435 (formerly 471) (1½) COMPILER CONSTRUCTION**

Compilation — including: lexical analysis, syntax analysis, semantic routines, code optimization, block structured languages and interpreters. Students will implement a compiler-interpreter for a simple language. (*Prerequisites*: 225, 265 and 320)

F(3-2)

**C SC 445 (formerly 448A) (1½) OPERATIONS RESEARCH: LINEAR PROGRAMMING**

An introduction to linear programming and its applications. Topics include: the simplex method, the revised simplex method, computer implementations, duality. Optional topics include: parametric and sensitivity analysis, primal-dual algorithm, network simplex method, the network flow problem, and game theory. Typical applications include: fitting curves to data, the transportation problem, inventory problems and blending problems. (*Prerequisite*: 349A; or fourth year standing and a grade of B or higher in 340)

F(3-0)

**C SC 446 (formerly 448B) (1½) OPERATIONS RESEARCH: SIMULATION**

An introduction to discrete event simulation. Topics include: elementary queueing theory, basic techniques of discrete event simulation, generating random numbers, sampling from non-uniform distributions, simulation programming using general purpose languages and also special purpose simulation languages. (*Prerequisites*: 115 or 160, STAT 252 or 260, and any 300 level Mathematics or Computer Science course)

S(3-0)

**C SC 449 (1½) NUMERICAL LINEAR ALGEBRA**

Gaussian elimination and its variants; sparse positive definite linear systems; sensitivity of linear systems: norms, condition, stability, scaling, iterative refinement; orthogonal matrices and least squares; eigenvalues and eigenvectors; the QR algorithm; the singular value decomposition. (*Prerequisite*: 349B)

F(3-0)

**C SC 450 (1½) COMPUTER COMMUNICATIONS AND NETWORKS**

This course will introduce concepts in computer communications and networks. Topics will include layered network architectures, packet

switching networks, local area networks, protocol design and verification, network security, and applications in distributed computing. (*Prerequisites*: 250 or 355; 360 and 365)

FS(3-3)

**C SC 454 (1½) FAULT TOLERANT COMPUTING**

An introduction to selected issues in fault tolerant computing. Topics include: definitions of reliability, availability, safety, maintainability, testability and dependability; system protection through both hardware and information redundancy; quantitative methods for the evaluation of reliability; the design and test of integrated circuits; software fault tolerance and software testing. The course includes a number of case studies of practical fault tolerant systems. (*Prerequisites*: 250 or 355; 360)

S(3-0)

**C SC 460 (1½) DESIGN AND ANALYSIS OF REAL-TIME SYSTEMS**

Fundamental issues in design of real-time operating systems and application software. Typical topics include: hard real-time scheduling, interrupt driven systems, process communication and synchronization, language requirements for real-time systems, decomposition of real-time requirements into process models, and case studies. A project involving design, implementation and testing of a real-time executive and real-time application software will also be included. (*Prerequisites*: 250 or 355; 360 and 365)

S(3-3)

**C SC 465 (1½) ADVANCED SOFTWARE ENGINEERING**

Techniques for the construction of complex, maintainable and reliable software at reasonable cost. This course provides the opportunity to gain software engineering experience in a controlled environment. Methods for software specification and design are emphasized. Additional topics may include configuration management, testing, and software tools. (*Prerequisite*: 365)

F(3-0)

**C SC 482 (1½) TOPICS IN ALGORITHMS**

(Offered as C SC 482A, 482B, 482C, 482D)

The topics in this course depend primarily on the interests of the instructor. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with the permission of the Chair of the Department.

FS(3-0)

**C SC 483 (1½) TOPICS IN PROGRAMMING METHODOLOGY**

(Offered as C SC 483A, 483B, 483C, 483D)

The topics in this course depend primarily on the interests of the instructor. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with the permission of the Chair of the Department.

FS(3-0)

**C SC 484 (1½) TOPICS IN SCIENTIFIC COMPUTING**

(Offered as C SC 484A, 484B, 484C, 484D)

The topics in this course depend primarily on the interests of the instructor. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with the permission of the Chair of the Department.

FS(3-0)

**C SC 485 (1½) TOPICS IN SYSTEMS**

(Offered as C SC 485A, 485B, 485C, 485D)

The topics in this course depend primarily on the interests of the instructor. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. This course may be taken more than once in different topics with the permission of the Chair of the Department.

FS(3-0)

**C SC 490 (1½ or 3) DIRECTED STUDIES**

Students must consult the Department before registering. This course may be taken more than once in different fields with permission of the Chair of the Department.

**C SC 499 (1½) TECHNICAL PROJECT**

Research under the direction of a faculty member. The student is required to pursue an independent project, to prepare a written report and to present a seminar describing the work. Open to fourth year Computer Science, Computer Science/Mathematics and Computer Science/Statistics Honours students only.

FSK(0-6)



# DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Stanislaw S. Stuchly, B.Sc., M.Sc. (Tech. U.-Poland), Ph.D. (Polish Acad. of Sciences), F.I.E.E.E., P.Eng., Professor and Chair of the Department

Panajotis Agathoklis, Dipl.El.Ing., Dr. Sc. Tech. (Swiss Fed. Inst. of Tech.), P.Eng., Professor

Andreas Antoniou, B.Sc., Ph.D. (Lond.), F.I.E.E.E., F.I.E.E., P.Eng., C.Eng., Professor

Vijay K. Bhargava, B.Sc. (Rajasthan), B.Sc., M.Sc., Ph.D. (Queen's), F.I.E.E.E., F.E.I.C., P.Eng., Professor

Ashoka K.S. Bhat, B.Sc. (Mys.), B.E., M.E. (Indian Inst. of Sci.), M.A.Sc., Ph.D. (Tor.), P.Eng., Professor

Jens Bornemann, Ing. (Fachhochschule, Hamb.), Dipl.-Ing., Dr.-Ing. (Bremen), P.Eng., Professor

Nikitas J. Dimopoulos, B.Sc. (National & Kapodistrian U. of Athens), M.Sc., Ph.D. (Maryland), Professor

Fayez El Guibaly, B.Sc. (Cairo), B.Sc. (Ain Shams), Ph.D. (Brit. Col.), P.Eng., Professor

Wolfgang J.R. Hoefler, Dipl.-Ing. (Aachen), Dr.-Ing. (Grenoble), P.Eng., Professor and N.S.E.R.C./M.P.R. Teltech Industrial Research Chair

R. Lynn Kirlin, B.S., M.S. (Wyo.), Ph.D. (Utah State), P.Eng., Professor

Harry H. L. Kwok, B.Sc. (Calif., L.A.), Ph.D. (Stan.), P.Eng., Professor

Wu-Sheng Lu, B.Sc. (Fudan), M.Sc. (E. China Normal), M.Sc., Ph.D. (Minn.), F.E.I.C., Professor

Eric G. Manning, B.Sc., M.Sc. (Wat.), Ph.D. (Ill.), F.I.E.E.E., P. Eng., Professor

Maria A. Stuchly, B.Sc., M.Sc. (Warsaw Tech. U.), Ph.D. (Polish Acad. of Sciences), F.I.E.E.E., P.Eng., Professor and N.S.E.R.C./B.C. Hydro/Trans-Alberta Utilities Industrial Research Chair in Electromagnetic Fields and Living Systems

Ruediger Vahldieck, Ing. (Luebeck), Dipl.-Ing., Dr.-Ing. (Bremen), Professor

Adam Zielinski, B. Eng., M.Eng., Ph.D. (Wroclaw), P.Eng., Professor

Peter F. Driessen, B.Sc., Ph.D. (Brit. Col.), P.Eng., Associate Professor

Jonathan M.-S. Kim, B.A.Sc., M.A.Sc., Ph.D. (Tor.), P.Eng., Associate Professor

Kin Fun Li, B.Eng., Ph.D. (Conc.), P.Eng., Associate Professor

Warren D. Little, B.A.Sc., M.A.Sc., Ph.D. (Brit. Col.), P.Eng., Associate Professor

Qiang Wang, B.Sc., M.Sc. (Nanjing), Ph.D. (U. of Vic.), P.Eng., Associate Professor

Demetrios T. Pavlides, B. Eng. (Conc.), M.Eng. (U. of Vic.), P.Eng., Manager of Laboratories

**Visiting, Adjunct and Cross-listed Appointments:**  
David M. Farmer, B.Com., M.Sc. (McG.), Ph.D. (Brit. Col.) Adjunct Professor (1994-96)

John W. Scrimger, B.A., M.A. (Sask.), Ph.D. (Tor.), Adjunct Professor (1993-95)

Harold W. Smith, B.A.Sc. (Tor.), Sc.D. (M.I.T.), P.Eng., Adjunct Professor (1993-95)

James S. Collins, B.Sc. (Dal.), B.Eng., M.Eng. (Tech.U.N.S.), Ph.D. (Wash.), P.Eng., Adjunct Associate Professor (1994-96)

Richard F. Hobson, B.Sc. (Brit. Col.), Ph.D. (Wat.), Adjunct Associate Professor (1993-95)

Dale Shpak, B.Sc., M.Eng. (Calg.), Ph.D. (U. of Vic.), P.Eng., Adjunct Associate Professor (1994-96)

Charlie Q. Yang, B.S.E.E. (U. of Vic.), Adjunct Assistant Professor (1994-96)

## 1.0 GRADUATE PROGRAMS

For information on studies leading to the M. Eng., M.A.Sc. and Ph.D. degrees, see page 325.

The Department participates in the Cooperative Education Program in the Faculty of Graduate Studies and by individual arrangement. Engineering graduate students may participate in a Cooperative Education graduate program as described in the Faculty of Graduate Studies section of this Calendar (page 288).

Further information may be obtained from the Department of Electrical and Computer Engineering Graduate Adviser.

Application forms for graduate admission are available from the Faculty of Graduate Studies.

## 2.0 UNDERGRADUATE PROGRAMS

The Department of Electrical and Computer Engineering offers programs leading to the B.Eng. degree in Electrical Engineering and the B.Eng. degree in Computer Engineering. Both programs are accredited by the Canadian Engineering Accreditation Board of the Canadian Council of Professional Engineers. Accreditation ensures that graduates of the programs satisfy the academic requirements for registration with the provincial Associations of Professional Engineers.

### 2.1 MANAGEMENT OPTION

The Faculty of Engineering in conjunction with the Faculty of Business offers a Management Option. For further details, see the Management Option listing at the end of the main Faculty entry.

### 2.2 FAST TRACK MASTER'S OPTION

The Department of Electrical and Computer Engineering offers outstanding undergraduate students an opportunity for a head start in a Master's program. Qualified students will be permitted to enroll in graduate level courses during their fourth year. These courses will be extra to any undergraduate requirements and thus can be transferred to the M.A.Sc. or M.Eng. degree program. All of the admission and transfer credit regulations of the Faculty of Graduate Studies must be met. For more information, please contact the Chair or the Graduate Adviser of the Department.

### 2.3 B.ENG. PROGRAM IN ELECTRICAL ENGINEERING

The B.Eng. program in Electrical Engineering consists of the Engineering Core (see section 2.9 in Faculty entry), the Electrical Engineering Core, and one of three Specialization Options.

#### 2.3.1 Electrical Engineering Core

|          |   |
|----------|---|
| CENG 290 | Digital Design: I <sup>1</sup>              |
| CENG 355 | Microprocessor Systems <sup>1</sup>         |
| CENG 390 | Digital Design: I <sup>2</sup>              |
| CENG 440 | Digital Design: II <sup>2</sup>             |
| C SC 230 | Computer Architecture and Assembly Language |
| ELEC 220 | Electrical Properties of Materials          |
| ELEC 250 | Linear Circuits: I                          |
| ELEC 260 | Signal Analysis: I                          |
| ELEC 300 | Linear Circuits: II                         |
| ELEC 310 | Signal Analysis: II                         |
| ELEC 320 | Electronic Devices: I                       |
| ELEC 330 | Electronic Circuits: I                      |
| ELEC 340 | Electromagnetic Field Theory                |
| ELEC 350 | Communications Theory and Systems: I        |
| ELEC 360 | Control Theory and Systems: I               |
| ELEC 370 | Electromechanical Energy Conversion         |
| ELEC 380 | Electronic Circuits: II                     |
| ELEC 395 | Seminar                                     |
| MECH 245 | Engineering Fundamentals: I                 |
| MECH 295 | Engineering Fundamentals: II                |

#### 2.3.2 Electrical Engineering Specialization Options

##### a) For those students admitted to Term 1A before September 1993

##### Microelectronics and VLSI Systems

|          |                             |
|----------|-----------------------------|
| ELEC 410 | Power Electronics           |
| ELEC 415 | Microelectronics Technology |
| CENG 465 | Digital VLSI Systems        |
| ELEC 470 | Electronic Devices: II      |

Two electives from List A of section 2.5

Two electives from List B of section 2.6



*Communications and Signal Processing*

|          |                                      |
|----------|--------------------------------------|
| ELEC 400 | Random Signals                       |
| ELEC 404 | Microwaves and Fiber Optics          |
| ELEC 408 | Analog Filters                       |
| ELEC 450 | Communications Theory and Systems: I |
| ELEC 454 | Microwave Engineering                |
| ELEC 458 | Digital Filters                      |

One elective from List A of section 2.5

One elective from List B of section 2.6

*Control Systems and Robotics*

|          |                                    |
|----------|------------------------------------|
| CENG 445 | Microprocessor Systems             |
| ELEC 403 | Engineering Design by Optimization |
| ELEC 425 | Robotics: I                        |
| ELEC 460 | Control Theory and Systems: II     |
| ELEC 475 | Robotics: II                       |

One elective from List A of section 2.5

Two electives from List B of section 2.6

**b) For those students admitted to Term 1A in or after September 1993***Electronics*

|          |                        |
|----------|------------------------|
| ELEC 410 | Power Electronics      |
| ELEC 412 | Electronic Devices: II |
| CENG 465 | Digital VLSI Systems   |
| ELEC 481 | Analog VLSI Systems    |

Two electives from List A of section 2.5

Two electives from List B of section 2.6

*Communications*

|          |                                       |
|----------|---------------------------------------|
| ELEC 400 | Random Signals                        |
| ELEC 404 | Microwaves and Fiber Optics           |
| ELEC 450 | Communications Theory and Systems: II |
| ELEC 458 | Digital Filters                       |

Two electives from List A of section 2.5

Two electives from List B of section 2.6

*Control Systems and Robotics*

|          |                                    |
|----------|------------------------------------|
| ELEC 403 | Engineering Design by Optimization |
| ELEC 425 | Robotics: I                        |
| ELEC 460 | Control Theory and Systems: II     |
| ELEC 475 | Robotics: II                       |

Two electives from List A of section 2.5

Two electives from List B of section 2.6

**2.4 B.ENG. PROGRAM IN COMPUTER ENGINEERING**

The B.Eng. program in Computer Engineering consists of the Engineering Core (see 2.9 in Faculty entry), the Computer Engineering Core, and a set of elective courses.

**2.4.1 Computer Engineering Core**

|          |  |
|----------|--|
| CENG 245 | Discrete Structures                          |
| CENG 290 | Digital Design: I <sup>1</sup>               |
| CENG 355 | Microprocessor Systems <sup>1</sup>          |
| CENG 390 | Digital Design: I <sup>2</sup>               |
| CENG 420 | Artificial Intelligence <sup>2</sup>         |
| CENG 440 | Digital Design: II                           |
| CENG 445 | Microprocessor Systems <sup>2</sup>          |
| CENG 450 | Computer Systems and Architecture            |
| CENG 455 | Real Time Computer Systems                   |
| CENG 460 | Computer Communication Networks <sup>2</sup> |
| C SC 225 | Algorithms and Data Structures               |
| C SC 230 | Computer Architecture and Assembly Language  |
| C SC 360 | Introduction to Operating Systems            |
| C SC 365 | Software Engineering                         |
| ELEC 220 | Electrical Properties of Materials           |
| ELEC 250 | Linear Circuits: I                           |
| ELEC 260 | Signal Analysis: I                           |
| ELEC 300 | Linear Circuits: II                          |
| ELEC 310 | Signal Analysis: II                          |
| ELEC 320 | Electronic Devices: I                        |
| ELEC 330 | Electronic Circuits: I                       |
| ELEC 350 | Communications Theory and Systems: I         |

|          |                               |
|----------|-------------------------------|
| ELEC 360 | Control Theory and Systems: I |
| ELEC 380 | Electronic Circuits: II       |
| ELEC 395 | Seminar                       |
| MECH 245 | Engineering Fundamentals: I   |

**2.4.2 Computer Engineering Elective Courses****a) For those students admitted to Term 1A before September 1993**

One elective from List A of section 2.5

One elective from List B of section 2.6

**b) For those students admitted to Term 1A in or after September 1993**

Two electives from List A of section 2.5

Two electives from List B of section 2.6

**2.5 LIST A MAY-AUGUST TERM\***

|          |                                      |
|----------|--------------------------------------|
| CENG 245 | Discrete Structures                  |
| CENG 420 | Artificial Intelligence <sup>1</sup> |
| CENG 430 | Digital Electronics                  |
| CENG 440 | Digital Design: II <sup>1</sup>      |
| CENG 445 | Microprocessor Systems <sup>2</sup>  |
| C SC 405 | Computer Graphics                    |
| ELEC 400 | Random Signals                       |
| ELEC 403 | Engineering Design by Optimization   |
| ELEC 404 | Microwaves and Fiber Optics          |
| ELEC 405 | Error Control Coding and Sequences   |
| ELEC 408 | Analog Filters                       |
| ELEC 410 | Power Electronics                    |
| ELEC 412 | Electronic Devices: II <sup>1</sup>  |
| ELEC 415 | Microelectronics Technology          |
| ELEC 425 | Robotics: I                          |
| ELEC 499 | Technical Project                    |
| MECH 410 | Computer Aided Design                |

**2.6 LIST B JANUARY-APRIL TERM\***

|           |                                       |
|-----------|---------------------------------------|
| CENG 460  | Computer Communication Networks       |
| CENG 465  | Digital VLSI Systems                  |
| C SC 349B | Numerical Analysis: II                |
| C SC 405  | Computer Graphics                     |
| C SC 454  | Fault Tolerant Computing              |
| ELEC 450  | Communications Theory and Systems: II |
| ELEC 452  | Fiber Optic Technology                |
| ELEC 453  | Antennas and Propagation              |
| ELEC 454  | Microwave Engineering                 |
| ELEC 456  | Mobile Communications                 |
| ELEC 458  | Digital Filters                       |
| ELEC 460  | Control Theory and Systems: II        |
| ELEC 470  | Electronic Devices: II <sup>2</sup>   |
| ELEC 475  | Robotics: II                          |
| ELEC 481  | Analog VLSI Systems                   |
| ELEC 482  | Electrical Drive Systems              |
| ELEC 485  | Pattern Recognition                   |
| ELEC 499  | Technical Project                     |
| MECH 460  | Computer Aided Manufacture            |

\* Courses that are not required by at least one of the specialization options may not be offered every year.

**3.0 ACADEMIC SCHEDULE****3.1 TERMS 1A AND 1B OF B.ENG. IN ELECTRICAL ENGINEERING AND B.ENG. IN COMPUTER ENGINEERING**

| Term 1A  | Term 1B  |
|----------|----------|
| C SC 110 | CHEM 150 |
| ENGL 115 | C SC 160 |
| MATH 100 | ENGR 150 |
| MATH 133 | MATH 101 |
| PHYS 122 | PHYS 125 |



### 3.2 TERMS 2A TO 4B OF B.ENG. IN ELECTRICAL ENGINEERING

| Term 2A   | Term 2B               | Term 3A               | Term 3B               |
|---|-----------------------|-----------------------|-----------------------|
| C SC 230  | ELEC 250              | C SC 349A             | CENG 390 <sup>3</sup> |
| ELEC 216  | ELEC 260              | ELEC 300              | ELEC 350              |
| ELEC 220  | ENGR 280 <sup>3</sup> | ELEC 310              | ELEC 360              |
| ENGR 240  | MATH 201              | ELEC 320              | ELEC 370              |
| MATH 200  | MECH 295              | ELEC 330              | ELEC 380              |
| MECH 245  | STAT 254              | ELEC 340              | ELEC 395              |
| Term 4A   |                       | Term 4B               |                       |
| CENG 440 <sup>2</sup>   |                       | ENGR 447 <sup>4</sup> |                       |
| ENGR 297  |                       | ENGR 498              |                       |
| ENGR 280 <sup>1</sup>   |                       | Specialization Option |                       |
| Specialization Option   |                       |                       |                       |
| Plus ENGR 446 Technical Report to be completed during last work term. |                       |                       |                       |

#### 3.2.1 Specialization Options

##### a) For those students admitted to Term 1A before September 1993

###### Microelectronics and VLSI Systems

| Term 4A                      | Term 4B                      |
|------------------------------|------------------------------|
| ELEC 410                     | CENG 465                     |
| ELEC 415                     | ELEC 470                     |
| Two electives<br>from List A | Two electives<br>from List B |

###### Communications and Signal Processing

| Term 4A                     | Term 4B                     |
|-----------------------------|-----------------------------|
| ELEC 400                    | ELEC 450                    |
| ELEC 404                    | ELEC 454                    |
| ELEC 408                    | ELEC 458                    |
| One elective<br>from List A | One elective<br>from List B |

###### Control Systems and Robotics

| Term 4A                     | Term 4B                      |
|-----------------------------|------------------------------|
| CENG 445                    | ELEC 460                     |
| ELEC 403                    | ELEC 475                     |
| ELEC 425                    | Two electives<br>from List B |
| One elective<br>from List A |                              |

##### b) For those students admitted to Term 1A in or after September 1993

###### Electronics

| Term 4A                      | Term 4B                      |
|------------------------------|------------------------------|
| ELEC 410                     | CENG 465                     |
| ELEC 412                     | ELEC 481                     |
| Two electives<br>from List A | Two electives<br>from List B |

###### Communications

| Term 4A                      | Term 4B                      |
|------------------------------|------------------------------|
| ELEC 400                     | ELEC 450                     |
| ELEC 404                     | ELEC 458                     |
| Two electives<br>from List A | Two electives<br>from List B |

###### Control Systems and Robotics

| Term 4A                      | Term 4B                      |
|------------------------------|------------------------------|
| ELEC 403                     | ELEC 460                     |
| ELEC 425                     | ELEC 475                     |
| Two electives<br>from List A | Two electives<br>from List B |

### 3.3 TERMS 2A TO 4B OF B.ENG. IN COMPUTER ENGINEERING

| Term 2A  | Term 2B               | Term 3A   | Term 3B               |
|----------|-----------------------|-----------|-----------------------|
| C SC 230 | CENG 245              | C SC 225  | CENG 390 <sup>3</sup> |
| ELEC 216 | ELEC 250              | C SC 349A | C SC 360              |
| ELEC 220 | ELEC 260              | ELEC 300  | ELEC 350              |
| ENGR 240 | ENGR 280 <sup>3</sup> | ELEC 310  | ELEC 360              |
| MATH 200 | MATH 201              | ELEC 320  | ELEC 380              |
| MECH 245 | STAT 254              | ELEC 330  | ELEC 395              |

| Term 4A                                   | Term 4B                                   |
|---|---|
| CENG 420 <sup>2</sup>                     | CENG 450                                  |
| CENG 440                                  | CENG 455                                  |
| CENG 445 <sup>2</sup>                     | CENG 460 <sup>2</sup>                     |
| C SC 365                                  | ENGR 447 <sup>4</sup>                     |
| ENGR 280 <sup>1</sup>                     | ENGR 498                                  |
| ENGR 297                                  | Elective(s)                               |
| Elective(s)                               | One elective<br>from List B <sup>2</sup>  |
| One elective<br>from List A <sup>2</sup>  | Two electives<br>from List B <sup>1</sup> |
| Two electives<br>from List A <sup>1</sup> |   |

Plus ENGR 446 Technical Report to be completed during last work term.

## 4.0 NOTES

- <sup>1</sup> Only for those students admitted to Term 1A in or after September 1993.
- <sup>2</sup> Only for those students admitted to Term 1A before September 1993.
- <sup>3</sup> For those students admitted to Term 1A in or after September 1993: Replace ENGR 280 by CENG 290  
Replace CENG 390 by CENG 355
- <sup>4</sup> May be replaced by courses in humanities, social sciences, arts, management, engineering economics or communications at a challenging level, as required by CEAB guidelines for complementary studies, and as approved by the Faculty of Engineering's B.Eng. Programs Committee. A current list of acceptable replacement courses may be obtained from the Undergraduate Office.

## 5.0 COMPUTER ENGINEERING COURSES

### CENG 245 (formerly 345) (1½) DISCRETE STRUCTURES

Set algebra; mappings and relations with applications in communications systems. Algebraic structures; semigroups and groups. Theory of undirected and directed graphs with applications in systems and circuit analysis. Boolean algebras, propositional logic, and introduction to the theory of automata with applications in digital design. (Prerequisites: MATH 101 and 133) K(3-0)

### CENG 290 (1½) DIGITAL DESIGN: I

Boolean algebra and switching theory. Minimization of switching functions. Design and analysis of combinational circuits. LSI and VLSI circuits. Sequential machine fundamentals. Synchronous sequential circuit design and analysis. Mealy and Moore machines. Emphasis will be placed on the electrical characteristics and properties of switching circuits including fan-out, noise margins, and power dissipation. Incompletely specified machines. (Prerequisite: ELEC 216) K(3-3)

### CENG 355 (1½) MICROPROCESSOR SYSTEMS

Introduction to microprocessor architecture. Instruction sets, addressing modes, and programming. Memories, I/O systems, and interfacing. Developmental systems. Application to engineering systems. (Prerequisites: 290 or 390 and C SC 230) F(3-1½)

### CENG 390 (1½) DIGITAL DESIGN: I

Binary Boolean algebra and its application to switching circuits. Transistor gates and their practical limitations. Integrated circuit logic families, such as DTL, TTL, ECL, MOSL and CMOSL. Application of combinational MSI and LSI circuits to electronic systems and instrumentation. (Prerequisite: ELEC 330) F(3-3)

### CENG 420 (formerly 490) (1½) ARTIFICIAL INTELLIGENCE

Philosophy of artificial intelligence. AI programs and languages, representations and descriptions, exploiting constraints. Rule based and heuristic systems. Applications to engineering. (Prerequisite: C SC 225) K(3-0)

### CENG 430 (1½) DIGITAL ELECTRONICS

Overview of integrated-circuit technology. Transistor-transistor logic. Emitter-coupled and current-mode logic. MOS logic. Mask-programmable ROM. RAM and EPROM technologies. Memory testing and error-correcting codes. (Prerequisite: 290 or 390 or equivalent) K(3-0)



**CENG 440 (1½) DIGITAL DESIGN: II**

Analysis, design, and practical limitations of flip flops. Characterization, analysis, design, and optimization of clock mode, pulse mode, and level mode sequential circuits. Practical limitations of sequential circuits and hazards. Design of registers, counters, and random access memories. Application of MSI and LSI sequential circuits to electronic systems and instrumentation. (*Prerequisite*: 390) K(3-1½)

**CENG 445 (1½) MICROPROCESSOR SYSTEMS**

Introduction to microprocessor architecture. Instruction set, addressing mode, and programming. Memories, I/O systems, and interfacing. Developmental systems. Application to engineering systems. (*Prerequisites*: 440, which may be taken concurrently; C SC 230) K(3-1½)

**CENG 450 (1½) COMPUTER SYSTEMS AND ARCHITECTURE**

Computer architectures and operating systems involving concurrency, parallel processing, real time processing, and computer communications. Topics covered include synchronization, deadlock, name management, resource allocation, pipelining, multiprocessors, packet switching networks, protocol design and verification, distributed systems. (*Prerequisites*: 440 and C SC 360) S(3-3)

**CENG 455 (1½) REAL TIME COMPUTER SYSTEMS**

Application of microcomputers and minicomputers to real time systems, e.g., data acquisition and control systems. I/O devices and instrumentation for real time applications. Design and simulation of real time systems. Real time operating systems. (*Prerequisites*: 445, ELEC 360 and C SC 360) S(3-1½)

**CENG 460 (1½) COMPUTER COMMUNICATION NETWORKS**

Introduction to computer networking principles and engineering including remote access, wide-area networking, local area networks, network topology, communication hardware and software protocols, open-system-interconnection model, routing and flow control, performance, reliability, security, example networks. (*Prerequisites*: C SC 230 and ELEC 350) S(3-0)

**CENG 465 (1½) DIGITAL VLSI SYSTEMS**

Evolution of VLSI. Design system concepts, integrated-circuit design approaches. Logic entry and verification tools, placement and routing algorithms. MOS circuit design techniques. Design for testability techniques. (*Prerequisite*: 290 or 390 or equivalent) S(3-1½)

**6.0 ELECTRICAL ENGINEERING COURSES****ELEC 216 (1½) ELECTRICITY AND MAGNETISM**

Electric charge, Coulomb's Law, electrostatic forces, electric field, Gauss's Law, electric potential, stored energy. Electric current, conduction in a vacuum and in material media, displacement current, magnetic field of a current, force on a current carrying wire, magnetic induction, electromotive force, energy stored in a magnetic field. Magnetism and magnetic circuits. Time varying fields. Capacitance, resistance, inductance, and their characterization. (*Prerequisite*: MATH 200 which may be taken concurrently) (Not open to students with credit in PHYS 216) F(3-3-1)

**ELEC 220 (1½) ELECTRICAL PROPERTIES OF MATERIALS**

Materials for engineering; atomic bondings, crystalline structures, properties of metals, glasses, semiconductors, insulators and magnetic materials. Electronic conduction in solids and simple devices. Materials in engineering design and environmental effects. (*Prerequisite*: 216 which may be taken concurrently) F(3-0-1)

**ELEC 250 (1½) LINEAR CIRCUITS: I**

Current, voltage, power and energy; resistance, inductance and capacitance; sources. Series and parallel circuits. Formulation of equilibrium equations using Kirchhoff's voltage and current laws. Network theorems: superposition, reciprocity, Thevenin, Norton, maximum power transfer. Step response of simple RC, RL and RLC circuits. Sinusoidal steady state response of RLC circuits, power in ac circuits, frequency response, resonance. Coupled coils and transformers, 3-phase circuits. (*Prerequisites*: 216 and MATH 201 which may be taken concurrently) K(3-1½)

**ELEC 260 (1½) SIGNAL ANALYSIS: I**

Continuous time signals and waveform calculations. The Fourier series in the analysis of periodic signals. The impulse and other elementary functions. Resolution of signals into impulse and unit step functions. The Fourier transform in spectral analysis. Functions of a complex variable. Analytic functions. Partial fractions. The Laplace transform in the representation of signals. Interrelation between the Fourier and Laplace transforms. (*Prerequisites*: 216, and MATH 133 and 200) K(3-0)

**ELEC 300 (1½) LINEAR CIRCUITS: II**

Controlled sources and ideal amplifiers. Analysis of active and passive circuits using the Laplace transform. Loop and node methods and matrix characterization of complex circuits. Driving point and transfer functions. Stability of active circuits. Frequency response of active and passive circuits; use of Bode plots. Two port networks and their characterization in terms of  $z$ ,  $y$ ,  $h$  and  $a$  parameters. (*Prerequisites*: 250 and 260) S(3-1½)

**ELEC 310 (1½) SIGNAL ANALYSIS: II**

Discrete time and sampled data. The impulse and other discrete time functions. Resolution of discrete time signals into impulse and unit step functions. Complex integrals. Complex series. The Taylor and Laurent series. Integration by the method of residues. The  $z$  transform in the representation of discrete time signals. Convergence of the Laplace and Fourier transforms. Continuous, sampled, and discrete time signals. The sampling theorem. The discrete and continuous Fourier transforms and the Fourier series. (*Prerequisite*: 260) S(3-0)

**ELEC 320 (1½) ELECTRONIC DEVICES: I**

Crystal structure and valence model of pure and doped semiconductors. Mobility and electrical conductivity. Mode of operation, physical mechanisms and characteristics of pn junctions; junction capacitance; breakdown; varactor, Zener and tunnel diodes. Modes of operation, physical mechanisms, and characteristics of junction and metal oxide-silicon field effect transistors and bipolar transistors. (*Prerequisite*: 220) S(3-1½)

**ELEC 330 (1½) ELECTRONIC CIRCUITS: I**

Nonlinear devices. Modelling and application of diodes: rectifiers, voltage regulators, waveform shaping circuits. Biasing of bipolar and field effect transistors. Small signal amplifiers. Multistage amplifiers. Nonlinear applications of transistors. Computer aided circuit analysis and design. (*Prerequisites*: 300 and 320 both of which may be taken concurrently) S(3-1½)

**ELEC 340 (1½) ELECTROMAGNETIC FIELD THEORY**

Field concept, Maxwell's equations. Boundary conditions. Power and energy. Electrostatic field. Electrostatic potential. Concept of capacitance. Conformal mapping in electrostatics. Polarization. Concept of local field in matter. Magnetostatic field. Biot-Savart law. Scalar magnetic potential. Plane waves. Total internal reflection. Brewster angle. (*Prerequisites*: 216 and 260) S(3-1½)

**ELEC 350 (1½) COMMUNICATIONS THEORY AND SYSTEMS: I**

Principles of amplitude, frequency and phase modulation. Modulators, mixers and demodulators. Representative examples of complete transmission systems. Qualitative treatment of modulation systems in the presence of noise. Elementary digital communications, PSK, FSK. (*Prerequisites*: 310 and 330) F(3-1½)

**ELEC 360 (1½) CONTROL THEORY AND SYSTEMS: I**

Characterization of systems; linearity, time invariance, and causality. General feedback theory; time and frequency domain analysis of feedback control systems; Routh-Hurwitz and Nyquist stability criteria; root locus methods; modelling of dc servo; design of simple feedback systems; introduction to state space methods. (*Prerequisites*: 300 and 310) F(3-1½)

**ELEC 365 (1½) APPLIED ELECTRONICS & ELECTRICAL MACHINES**

Characteristics of electronic devices including diodes, bipolar junction transistors and operational amplifiers; analysis of practical electronic circuits such as rectifiers, voltage regulators, amplifiers and filters; fundamentals of electromechanical energy conversion; transformers and actuators; operating principles of rotating electric machines: dc machines and ac machines. (*Prerequisite*: 216) F(3-1½)



**ELEC 370 (1½) ELECTROMECHANICAL ENERGY CONVERSION**

Faraday's law of electromagnetic induction, transformers and generators. Lorentz's force and Coulomb's force and their applications in industrial motors. Lumped parameter concepts of inductance and motional inductance. Energy and coenergy in the derivation of torques and forces. Structures and performance characteristics of dc, synchronous, and induction machines. (Prerequisites: 250 and MECH 245)F(3-1½)

**ELEC 380 (1½) ELECTRONIC CIRCUITS: II**

Power amplifiers. Linear and nonlinear distortion. High frequency models for transistors. Differential amplifiers. Operational amplifiers, their parameters and models. Negative feedback. Applications of operational amplifiers: instrumentation amplifiers, comparators, precision rectifiers. Oscillators and timers. Introduction to phase locked loops. Computer aided circuit analysis and design. (Prerequisite: 330) F(3-3)

**ELEC 395 (formerly ENGR 395) (1) SEMINAR**

The purpose of this course is to provide students with an opportunity to exercise their ability to present and to defend their thoughts on topics of their own choice. Students will be encouraged to devote some of their discussions to such topics as continuing professional education, professional societies, organization of engineering employment, and professional ethics. (Prerequisite: Completion of terms 1A to 2B) (Grading: COM, N or E) F(2-0)

**ELEC 400 (1½) RANDOM SIGNALS**

Review of random variables, moments and characteristic functions; random processes, noise models, stationarity, ergodicity, correlation and power spectrum, spectrum measurements; response of linear systems to random inputs, cross spectral densities, narrow band noise; introduction to discrete time and space processes. (Prerequisites: 310 and STAT 254) K(3-0)

**ELEC 403 (1½) ENGINEERING DESIGN BY OPTIMIZATION**

The steepest descent and Newton methods for unconstrained optimization. Golden section, quadratic, cubic and inexact line searches. Conjugate and quasi-Newton methods. The Fletcher-Reeves algorithm. Application to the design of circuits, control systems, filters, and mechanical systems using optimization techniques. Introduction to constrained optimization. The course includes laboratory sessions to program various optimization algorithms and to apply them to several modeling and engineering design problems. (Prerequisites: 360 or MECH 380, C SC 349A) K(3-1½)

**ELEC 404 (1½) MICROWAVES AND FIBER OPTICS**

TEM transmission lines, rectangular and circular waveguides, planar transmission lines, characteristic impedance, impedance transformation, Smith chart and impedance matching, transients on transmission lines, coupled lines, light transmission in optical fiber, numerical aperture, single mode and multimode fiber, chromatic dispersion. (Prerequisites: 300, 310 and 340) K(3-1½)

**ELEC 405 (1½) ERROR CONTROL CODING AND SEQUENCES**

Coding approaches and characteristics; linear block codes, convolutional code structure and Viterbi decoding; automatic repeat request techniques; trellis coded signalling; sequence design, error control in data storage systems and in information transmission. K(3-0)

**ELEC 408 (1½) ANALOG FILTERS**

Introduction to analog signal processing. Characterization, properties, and analysis of analog filters. Butterworth, Chebyshev, and elliptic approximations. Introduction to the realization of LC one- and two-port circuits; Darlington's method. Active elements such as gyrators and generalized impedance converters, and their representation by singular elements. Design of high-performance, low-sensitivity active filters. (Prerequisites: 310 and 380) K(3-0)

**ELEC 410 (1½) POWER ELECTRONICS**

The application of electronics to energy conversion and control. Electrical thermal characteristics of power semiconductor devices: diodes, bipolar and field effect transistors, and thyristors. Magnetic circuits for energy conversion. Active and passive filtering techniques. Emphasis on device limitations, computer aided analysis and design and system control. Application samples including multipulse controlled rectifiers,

high frequency induction heating, dc-dc conversion, cycloconverters, motor drives, and battery electronics. (Prerequisites: 370 and 380) K(3-1½)

**ELEC 412 (1½) ELECTRONIC DEVICES: II**

Study of the principles and operation of bipolar and field-effect devices in VLSI design. Study of photonic and opto-electronic devices used in transmission, modulation, demodulation and receivers. Principles of lasers and their applications. Study of display devices, thin-film devices, imaging devices, transducers and micromachines and their interfacing. Sensor arrays and systems. (Prerequisite: 320) K(3-0)

**ELEC 415 (1½) MICROELECTRONICS TECHNOLOGY**

Alloyed contacts, diffusion techniques, diffusion theory, four point probe, ion implantation, epitaxial growth, silicon dioxide formation, photolithography, window opening, selected metallization, diode and transistor fabrication, junction depth determination, junction capacitance for general profile, fabrication of monolithic integrated circuits, isolation, junction capacitors, diffused resistors, mask making, device mounting, thin film passive components, thick film components, integrated circuit layout, MOS gate voltage, MOS integrated circuits. (Prerequisite: 320) K(3-1½)

**ELEC 425 (1½) ROBOTICS: I**

Structure and specification of robot manipulators; homogeneous transformations; kinematic equations and their solution; differential relationships, motion trajectories; dynamic models for robot manipulators. (Prerequisites: 360 and MECH 245) K(3-0)

**ELEC 450 (1½) COMMUNICATIONS THEORY AND SYSTEMS: II**

Transmission and filtering of random signals, analysis of modulation systems, in particular pulse code modulation, phase shift keying, frequency shift keying, etc., introduction to noise analysis, information theory and coding. (Prerequisites: 350 and 400) S(3-1½)

**ELEC 452 (1½) FIBER OPTIC TECHNOLOGY**

Light and electromagnetic waves, dielectric slab waveguide, step-index fiber, graded index fiber, effects of dispersion, phase velocity, attenuation, LED (principles), principles of lasers, semiconductor lasers, principles of semiconductor photodetectors, PIN photodiode, avalanche photodiode, electro-optic modulators, couplers, attenuators, isolators, switches, fiber optic systems. (Prerequisite: 340) S(3-0)

**ELEC 453 (1½) ANTENNAS AND PROPAGATION**

Antenna and propagation fundamentals, Friis transmission formula, radar equation, Maxwell's equations for radiation problems, antenna parameters, simple radiators, array theory, mutual coupling, wire and broadband antennas, aperture radiators, scattering and diffraction, multipath propagation and fading, antenna measurement techniques, surface-wave and ionospheric propagation, microwave and millimeter-wave propagation. (Prerequisite: 340) S(3-0)

**ELEC 454 (1½) MICROWAVE ENGINEERING**

Circuit theory for waveguiding systems, scattering parameters, waveguide discontinuities, couplers, resonators, microwave filters, nonreciprocal devices, design of active microwave circuits. (Prerequisite: 404) S(3-1½)

**ELEC 456 (1½) MOBILE COMMUNICATIONS**

Fading and shadowing, noise and interference effects; source coding, modulation, error control coding, spread spectrum and multiplexing techniques for mobile communications; capacity estimation and comparative (FDMA/TDMA/CDMA) analysis of PCN and Cellular Systems; capacity estimation for wireless PABX and LAN systems. (Prerequisites: 350 and 450 which may be taken concurrently) S(3-0)

**ELEC 458 (1½) DIGITAL FILTERS**

Introduction of the digital filter as a discrete time system. Discrete time transfer function. Time domain and frequency domain analysis. Structures for recursive and nonrecursive digital filters. Application of digital filters for the processing of continuous time signals. Solution of the approximation problem in recursive and nonrecursive filters. Quantization effects. (Prerequisite: 360) S(3-0)



**ELEC 460 (1½) CONTROL THEORY AND SYSTEMS: II**

Sampling in Control Systems. The z-transform and responses between sampling instants. Analysis of sampled data systems and stability testing. State-space analysis and design of continuous and discrete systems. Controllability, observability and zero input stability analysis. Pole placement techniques. (*Prerequisite:* 360) S(3-0)

**ELEC 470 (1½) ELECTRONIC DEVICES: II**

Modes of operation, physical mechanisms, characteristics, and modelling of MOS transistors, Schottky junctions, tunnel diodes, photovoltaic solar cells, Gunn diodes, microwave bipolar transistors, GaAs field effect transistors, and other modern semiconductor devices. (*Prerequisite:* 320) S(3-1½)

**ELEC 475 (1½) ROBOTICS: II**

Dynamic models of robot manipulators; position and speed control. Programming for real time computation and control. Simplification of dynamic models, trajectory generation. Programming languages for robot manipulators. Interaction with the environment using sensors. (*Prerequisites:* 425, 460, which may be taken concurrently, and CENG 445) S(3-1½)

**ELEC 481 (1½) ANALOG VLSI SYSTEMS**

Review of IC technologies, device models and design concepts. Design of monolithic op amps, regulators, multipliers, oscillators, PLLs, A/D and D/A converters and other non-linear and high-speed ICs. Study and

design of integrated filters, switched-capacitor circuits, CCDs and other sampled-data circuits. Design and applications of analog neural network and other analog-digital LSI. (*Prerequisites:* 320 and 380) S(3-0)

**ELEC 482 (1½) ELECTRICAL DRIVE SYSTEMS**

Elements of drive systems, characterization of mechanical loads, requirements of electrical drive systems, dynamic equations and modelling of electrical machines, dc drives with various dc power sources, induction motor drives, ac controller, slip-energy recovery, constant air-gap flux, synchronous motor drives, permanent magnet motors, reluctance motors. (*Prerequisites:* 365 or 370) S(3-0)

**ELEC 485 (formerly CENG 485) (1½) PATTERN RECOGNITION**

Parallel and sequential recognition methods. Bayesian decision procedures, perceptrons, statistical and syntactic approaches, recognition grammars. Feature extraction and selection, scene analysis, and optical character recognition. (*Prerequisite:* STAT 254) S(3-0)

**ELEC 499 (1½) TECHNICAL PROJECT**

The course provides an opportunity for each student to carry out a suitable engineering project under the supervision of a faculty member. Projects will involve design, implementation, and testing of hardware and/or software. Each student is expected to present oral and written reports. (*Prerequisite:* The student must be registered in term 4A or 4B) KS(0-6)

## DEPARTMENT OF MECHANICAL ENGINEERING

Behrouz Tabarrok, B.Sc. (Wolverhampton Polytech.), D. Phil. (Oxon.), P.Eng., F.C.S.M.E., F.E.I.C., Professor and Chair of the Department

John A. Barclay, B.S. (Notre Dame, Indiana), Ph.D. (Calif., Berk.), Professor (N.S.E.R.C. Industrial Chair)

Sadik Dost, B.Sc., M. Sc. (Karadeniz Tech. U.), Ph.D. (Istanbul Tech. U.), P.Eng., F.C.S.M.E., Professor

James W. Provan, B.Sc. (Strath.), M.Sc., Ph.D. (Colo.), P.Eng., Professor

David S. Scott, B.Sc., M.Sc. (Queen's), Ph.D. (Northw.), P.Eng., Professor

Yury Stepanenko, Dip.Eng. (Moscow Inst. of Machine Tool Eng.), Candidate of Science (Moscow Eng. Res. Inst.), D.Sc. (Academy of Science, U.S.S.R.), Professor

Geoffrey W. Vickers, Dip.Eng. (Birm.), M.Sc., Ph.D. (Manc.), P.Eng., C.Eng., Professor

Nedjib Djilali, B.Sc. (Hatfield Polytech.), M.Sc. (Lond.), Ph.D. (Brit. Col.), P.Eng., Associate Professor

Zuomin Dong, B.Sc. (Beijing Polytech.), M.Sc., Ph.D. (N.Y. State), Associate Professor

Xianguo Li, B.Sc. (Tianjin), M.Sc., Ph.D. (Northw.), Associate Professor

Gerard F. McLean, B.A.Sc., M.A.Sc., Ph.D. (Wat.), P.Eng., Associate Professor

Ron P. Podhorodeski, B.Sc., M.Sc. (Man.), Ph.D. (Tor.), P.Eng., Associate Professor

Joanne L. Wegner, B.Sc. (Calg.), M.Sc., Ph.D. (Alta.), P.Eng., Associate Professor

Colin H. Bradley, B.A.Sc. (Brit. Col.), M.S. (Heriot-Watt), Ph.D. (U. of Vic.), P.Eng., Assistant Professor

Charles Konzelman, B.Sc. (Man.), M.A.Sc. (Tor.), Ph.D. (Penn. State), Assistant Professor

Meyer Nahon, B.Sc. (Queen's), M.Sc. (Tor.), Ph.D. (McG.), P.Eng., Assistant Professor

Inna Sharf, B.Sc., Ph.D. (Tor.), P.Eng., Assistant Professor

**Adjunct Faculty:**

Christopher J. Damaren, B.A.Sc., M.A.Sc., Ph.D. (Tor.) (1995-96)

Allan G. Doige, B.E., M.Sc. (Sask.), Ph.D. (Purdue), P.Eng. (1993-95)

James B. Haddow, B.Sc. (St. And.), M.Sc. (Alta.), Ph.D. (Manc.) (1994-96)

Eric H. Richardson, B.A., M.A. (Brit. Col.), Ph.D. (Tor.) (1995-97)

Hans-Holger Rogner, Dip. Wi-Ing., Ph.D. (Karslsruhe) (1994-96)

Robert B. Thirsk, B.Sc. (Calg.), M.Sc. (M.I.T.), M.D.C.M. (McG.) (1994-96)

David Walsh, B.Eng. (U. Coll., Cork), M.Sc. (Ott.), Ph.D. (Nott.) (1995-97)

Peter M. Wild, B.A.Sc. (Brit. Col.) (1994-95)

Wei-Wu Zhou, B.Sc. (Xian Jiaotong), M.Sc. (Dalian Maritime), Ph.D. (Tech. U. Denmark) (1994-96)

**Senior Technical Personnel:**

David L. Gawley, B.Sc. (Wat.), Senior Scientific Assistant

Rodney M. Katz, Cert.Eng. Technician, Scientific Machinist

Minh Hi Ly, B. Eng. (Ho Chi Minh Polytech.), Senior Scientific Assistant

Arthur Makosinski, B.A. (Newark St. Coll.), Manager of Laboratories

## 1.0 GRADUATE PROGRAMS

For information on studies leading to the M.Eng., M.A.Sc. and Ph.D. degrees, see Faculty of Graduate Studies — Mechanical Engineering entry.

## 2.0 UNDERGRADUATE PROGRAMS

The Department of Mechanical Engineering offers a program leading to the B.Eng. degree in Mechanical Engineering. The program is accredited by the Canadian Engineering Accreditation Board of the Canadian Council of Professional Engineers. Accreditation ensures that graduates of the programs satisfy the academic requirements for registration with the provincial Associations of Professional Engineers.

The program B.Eng. in Mechanical Engineering consists of the Engineering Core (see main Faculty entry), Mechanical Engineering Core, and six Technical Electives. The technical electives allow specialization in various areas of Mechanical Engineering (see list of Technical Electives).

## 2.1 MANAGEMENT OPTION

The Faculty of Engineering in conjunction with the Faculty of Business offers a Management Option. For further details, see the Management Option listing at the end of the main Faculty entry.



## 2.2 MECHANICAL ENGINEERING CORE

|          |   |
|----------|---|
| ELEC 365 | Applied Electronics and Electrical Machines |
| MECH 220 | Mechanics of Solids: I                      |
| MECH 240 | Thermodynamics                              |
| MECH 241 | Statics                                     |
| MECH 242 | Dynamics                                    |
| MECH 285 | Properties of Engineering Materials         |
| MECH 320 | Mechanics of Solids: II                     |
| MECH 330 | Machine Dynamics                            |
| MECH 335 | Theory of Mechanisms                        |
| MECH 345 | Mechanics of Fluids: I                      |
| MECH 350 | Engineering Design: I                       |
| MECH 355 | Introduction to Microprocessors             |
| MECH 360 | Engineering Design: II                      |
| MECH 380 | Automatic Control Engineering               |
| MECH 390 | Energy Conversion                           |
| MECH 392 | Mechanics of Fluids: II                     |
| MECH 395 | Heat and Mass Transfer                      |
| MECH 400 | Design Project                              |
| MECH 455 | Instrumentation                             |

## 2.3 MECHANICAL ENGINEERING TECHNICAL ELECTIVES<sup>1</sup>

### *Applied Mechanics*

|          |                              |
|----------|------------------------------|
| MECH 470 | Applied Theory of Elasticity |
| MECH 475 | Mechanics of Flight          |

### *Control and Robotics*

|          |                                     |
|----------|-------------------------------------|
| MECH 430 | Robotics                            |
| MECH 480 | Advanced Control Theory             |
| MECH 485 | Mechanism and Manipulator Synthesis |

### *Design and Computer Aided Engineering*

|          |  |
|----------|--|
| MECH 410 | Computer Aided Design                          |
| MECH 420 | Finite Element Applications                    |
| MECH 425 | Engineering Optimization and its Applications  |
| MECH 495 | Computational Fluid Dynamics and Heat Transfer |

### *Energy and Thermodynamics*

|          |                        |
|----------|------------------------|
| MECH 443 | Combustion Engineering |
| MECH 445 | Cryogenic Engineering  |
| MECH 447 | Energy Systems         |

### *Engineering Manufacture & Business Management*

|          |  |
|----------|--|
| MECH 411 | Organization of the Production Process |
| MECH 412 | Industrial Economics                   |
| MECH 460 | Computer Aided Manufacture             |
| MECH 461 | Plasticity and Manufacturing Process   |
| MECH 462 | Small Business Organization            |
| MECH 465 | Sensors for Industry                   |

### *Ocean Engineering*

|          |                                       |
|----------|---------------------------------------|
| MECH 440 | Introduction to Water Wave Phenomena  |
| MECH 490 | Underwater Acoustics and Applications |
| MECH 491 | Wave Forces on Offshore Structures    |

### *Selected Topics and Technical Projects*

|          |                        |
|----------|------------------------|
| MECH 450 | Special Topics Courses |
| MECH 499 | Technical Project      |

## 3.0 ACADEMIC SCHEDULE

### 3.1 TERMS 1A AND 1B OF B. ENG. IN MECHANICAL ENGINEERING

| Term 1A  | Term 1B  |
|----------|----------|
| C SC 110 | CHEM 150 |
| ENGL 115 | C SC 160 |
| MATH 100 | ENGR 150 |
| MATH 133 | MATH 101 |
| PHYS 122 | PHYS 125 |

### 3.2 TERMS 2A TO 3B OF B.ENG. IN MECHANICAL ENGINEERING

Schedule I, II & III: For students who have completed Term 1B prior to 1992, see 1993/94 Calendar Entry

Schedule IV: For students who have completed Term 1B after 1991

| Term 2A  | Term 2B  | Term 3A   | Term 3B  |
|----------|----------|-----------|----------|
| ELEC 216 | ELEC 250 | C SC 349A | ELEC 365 |
| ENGR 240 | ENGR 297 | MECH 320  | MECH 330 |
| MATH 200 | STAT 254 | MECH 335  | MECH 360 |
| MATH 201 | MECH 220 | MECH 345  | MECH 380 |
| MECH 240 | MECH 242 | MECH 350  | MECH 392 |
| MECH 241 | MECH 285 | MECH 390  | MECH 395 |

### 3.3 TERMS 4A AND 4B OF B.ENG. IN MECHANICAL ENGINEERING

Schedule I, II & III: For students who have completed Term 1B prior to 1992, see 1993/94 Calendar Entry

Schedule IV: For students who have completed Term 1B after 1991

| Term 4A                                | Term 4B                                |
|--|--|
| ENGR 280                               | ENGR 447 <sup>2</sup>                  |
| MECH 400                               | ENGR 498                               |
| MECH 355                               | MECH 455                               |
| 3 electives from List A of Section 3.4 | 3 electives from List B of Section 3.4 |

Plus ENGR 446 Technical Report to be completed during last work term.

### 3.4 TECHNICAL ELECTIVE COURSES<sup>3</sup>

| List A May-August Term | List B January-April Term |
|------------------------|---------------------------|
| MECH 410               | MECH 412                  |
| MECH 411               | MECH 425                  |
| MECH 420               | MECH 443                  |
| MECH 430               | MECH 450                  |
| MECH 440               | MECH 460                  |
| MECH 445               | MECH 461                  |
| MECH 447               | MECH 465                  |
| MECH 450               | MECH 475                  |
| MECH 462               | MECH 480                  |
| MECH 470               | MECH 485                  |
| MECH 490               | MECH 491                  |
| MECH 495               | MECH 499                  |
| MECH 499               |                           |

## 4.0 NOTES:

- <sup>1</sup> With the permission of the Department, students may select courses as technical electives, from the list of 500 level Mechanical Engineering Graduate courses. With the permission of the involved Departments, students may take a limited number of Upper Level courses as technical electives from other Departments.
- <sup>2</sup> May be replaced by courses in humanities, social sciences, arts, management, engineering economics or communications at a challenging level, as required by CEAB guidelines for complementary studies, and as approved by the Faculty of Engineering's B.Eng. Programs Committee. A current list of acceptable replacement courses may be obtained from the Undergraduate Office.
- <sup>3</sup> Depending on student interest and faculty availability, courses from the Technical Electives lists will be offered by the Department. Occasionally, some courses from List A will be offered in the List B term and vice versa.

## 5.0 MECHANICAL ENGINEERING COURSES

### MECH 220 (1½) MECHANICS OF SOLIDS: I

Review of bending moment and shear force diagrams for beams. Introduction of stress and strain; axial loading, torsion, pure bending and transverse loading. Stress and strain transformation in two dimensions. Mohr's circle. Beam deflection, stability of columns. (*Prerequisite*: MATH 200 which may be taken concurrently) K(3-3\*-1)

\* implies a 3 hour laboratory taken by students on alternate weeks.



**MECH 240 (formerly MECH 340) (1½) THERMODYNAMICS**

First law and second law analysis as applied to open and closed systems. The properties and behaviour of both ideal and real substances, with applications to the analysis and design of engineering systems. The importance of second law analysis with the concept of the exergy (ability to produce work) as distinct from "energy." (Corequisite: MATH 200) F(3-0-1)

**MECH 241 (1½) STATICS**

Review of vector algebra. Forces, moments of forces, couples, resultants of force systems; distributed loads; hydrostatics; conditions of equilibrium and application to particles and rigid bodies; analysis of statically determinate structures including beams, trusses and arches; bending moment and shear force diagrams; dry friction problems; principles of virtual work; potential energy, stable and unstable equilibrium. (Prerequisite: PHYS 122) F(3-0-1)

**MECH 242 (1½) DYNAMICS**

Cartesian, normal-tangential and polar components of velocity and acceleration, in two and three dimensions; rotating frames; force/acceleration, impulse/momentum; energy methods; conservative and non-conservative systems; systems of particles, systems of streams of particles and rigid bodies; introduction to three dimensional problems of particle and rigid body dynamics. (Prerequisite: PHYS 122 and 241 or 245) K(3-0-1)

**MECH 245 (formerly ENGR 245) (1½) ENGINEERING FUNDAMENTALS: I**

Resultant of force systems, equilibrium of particles and rigid bodies; centroids and centre of gravity, friction, virtual work and potential energy based methods; moments of inertia; kinematics of particles and rigid bodies; force and acceleration; work and energy; impulse and momentum for particles. (Prerequisites: PHYS 122 and MATH 200 which may be taken concurrently) F(3-0-1)

**MECH 285 (formerly MECH 325) (1½) PROPERTIES OF ENGINEERING MATERIALS**

Atomic structure, arrangement and movement; equilibrium microstructural development and heat treatment; physical properties of ferrous and nonferrous metals, ceramics, polymers and composites; corrosion and mechanical testing. (Prerequisite: CHEM 150, or 100 and 102, or 101 and 102, or 140 and 102) K(3-3\*-1)

**MECH 295 (formerly ENGR 270) (1½) ENGINEERING FUNDAMENTALS: II**

Ideal gas laws; work and heat; conservation of energy; thermodynamic properties of pure substances; equations of state; applications to open and closed systems; second law of thermodynamics; non-conservation of entropy; energy conversion systems; heat transfer by conduction, convection and radiation. (Prerequisites: PHYS 125 and MATH 101) K(3-0)

**MECH 320 (formerly MECH 280) (1½) MECHANICS OF SOLIDS: II**

Theory of stress and infinitesimal strain in three dimensions, equilibrium equations, stress-strain-temperature relations for isotropic elastic solids, statically indeterminate structures. Castigliano's theorems, thick-walled cylinders and spherical shells, torsion of prismatic bars, curved beams, introduction to plate theory, limits of elasticity, creep. (Prerequisite: 220) S(3-3\*-1)

**MECH 330 (1½) MACHINE DYNAMICS**

Balancing of rigid rotors; single plane and two-plane balancing, analytical and experimental field balancing methods. Balancing of reciprocating machines; single cylinder shaking forces, multicylinder engines and compressors of different configurations. Vibration of single-mass systems; free vibration characteristics, harmonic forcing, frequency response functions, applications to vibration isolation and transmissibility, shaft whirl, and vibration transducers. Fourier series solutions for periodic forcing. Multi-mass systems; frequencies and modes for undamped systems, matrix methods, orthogonality of modes and iteration methods. Beam and shaft vibration; Euler equation, frequencies and modes for classical boundary conditions, critical speeds of shafts. (Prerequisite: 242 or 245) F(3-3\*-1)

**MECH 335 (1½) THEORY OF MECHANISMS**

Types of mechanisms. Analysis of the kinematics of closed loop linkages using graphical, vector and complex number methods. Follower motion synthesis and design of cam profiles. Gear terminology and the analysis of gear trains. Analysis of static and dynamic loading of mechanisms; flywheel design. Introduction to linkage synthesis, spatial open loop mechanisms with applications to manipulators. (Prerequisite: 242 or 245) S(3-1-1)

**MECH 345 (1½) MECHANICS OF FLUIDS: I**

Fluid properties. Fluid statics. Control volume approach; conservation of mass, momentum, and energy. Dimensional analysis. Flow in pipes. Flow measurement. Boundary layers. Turbomachinery. (Prerequisite: MATH 200) S(3-3\*-1)

**MECH 350 (formerly MECH 260) (1½) ENGINEERING DESIGN: I**

Design methodology; recognizing and defining open ended engineering problems, generating creative solutions, modelling, analysis, synthesis, computing and testing. Students complete a series of design oriented projects in small teams. (Prerequisite: ENGR 150) S(3-0)

**MECH 355 (1½) INTRODUCTION TO MICROPROCESSORS**

Computer structure and organization; number systems and codes; assembler language; introduction to microprocessors and their application in instrumentation, manufacturing, control and automation. (Prerequisite: CSC 160) K(3-3\*-1)

**MECH 360 (1½) ENGINEERING DESIGN: II**

Design concepts; factors of safety; reliability; codes and standards. Design properties of engineering materials; strength and cold work; creep; impact properties; temperature effects; notch sensitivity; fatigue. Design of mechanical components; fasteners; welded joints; stress concentrations; mechanical springs; bearings; lubrication; clutches and brakes; shafts and axles; gearing. (Prerequisite: 220) F(3-0-1)

**MECH 380 (1½) AUTOMATIC CONTROL ENGINEERING**

Representation of control systems, steady-state operations. Laplace transformations, transient responses, stability. Frequency-response methods. Bode diagrams. Nyquist criterion, system compensation. (Prerequisite: 242 or 245) F(3-3\*-1)

**MECH 390 (1½) ENERGY CONVERSION**

Thermal power generation, vapor and gas cycles, refrigeration and heat pumps, non reacting gas mixtures and psychrometrics, reacting mixtures, combustion, and electro-chemical energy conversion. Introduction to alternative energy source technologies and energy modelling and economics. (Prerequisite: 240) S(3-3\*-1)

**MECH 392 (1½) MECHANICS OF FLUIDS: II**

Differential analysis of fluid motion, potential flow. Incompressible inviscid flow. Fluid flow about immersed bodies. Flow in open channels. Introduction of compressible flow: steady one-dimensional compressible flow. Turbo machinery. (Prerequisite: 345) F(3-3\*-1)

**MECH 395 (1½) HEAT AND MASS TRANSFER**

Analytic and numerical analysis of steady and transient conduction in solids. Principles of convection and analyses of heat transfer under laminar and turbulent flow over flat plates and inside and over pipes. Thermal radiation physics and radiation between multiple black and gray surfaces. (Prerequisites: 240 and 345) F(3-3\*-1)

**MECH 400 (1½) DESIGN PROJECT**

Complete design of a product or a system; specification of function, analysis, selection of materials, strength calculations, preparation of working drawings, cost analysis and tenders, preparation of final design report and symposium presentation of final design. Weekly seminar series featuring topics related to design, safety, marketing and management. (Prerequisite: 350) K(2-0-2)

**MECH 410 (1½) COMPUTER AIDED DESIGN**

Basic elements of CAD and relevance to current industrial practice; computational geometry for design and 3-D geometry; methods for curve and surface fitting; input and output devices for computer graphics, passive as well as active; representation of physical surfaces and computer aided drafting; graphical programming languages; development of interactive 3-D computer graphics. (Prerequisites: ENGR 150, and MATH 133 and 200) K(3-1½)



**MECH 411 (1½) INTEGRATED PRODUCTION PLANNING AND CONTROL**

Basic taxonomy of manufacturing, types of production processes, components of a production system, and concepts of production control. Experience-based and knowledge-based process planning approaches, process capability analysis, group technology, and Computer-Aided Process Planning. Forecasting, inventory systems, aggregate production planning, material requirements planning, and operation sequencing and scheduling. Case studies on advanced manufacturing systems. (Prerequisite: C SC 349A) K(3-0)

**MECH 412 (1½) INDUSTRIAL ECONOMICS**

Concepts of business and the economic feasibility of engineering undertakings, rate of return, payback period, replacement decisions, resource allocations, critical path analysis. (Prerequisite: C SC 349A) K(3-0)

**MECH 420 (1½) FINITE ELEMENT APPLICATIONS**

Formulation and application of the finite element method for modelling mechanical systems, including stress and vibration problems; stiffness method, stiffness and mass matrices, generalized force, numerical procedures; development of simple programs and exposure to general purpose packages. (Prerequisite: 320) K(3-1)

**MECH 425 (1½) ENGINEERING OPTIMIZATION AND APPLICATIONS**

One dimensional optimization techniques based on region elimination, polynomial approximation, and deviations. Multiple variable optimization techniques, including direct search methods and gradient-based methods. Constrained optimization based on the penalty, feasible direction, reduced gradient, and gradient projection. Introduction to linear programming, integer programming, and quadratic programming. Applications of numerical optimization to solve typical mechanical design, manufacturing, planning and control problems. (Prerequisites: MATH 200 and C SC 349A) S(3-1)

**MECH 430 (1½) ROBOTICS**

Structure and specifications of robot manipulators; homogeneous transformations; kinematic equations and motion trajectories; dynamic models of robotic manipulators; position and force control; use of robots in industrial applications. (Prerequisite: 335) K(3-1)

**MECH 440 (1½) INTRODUCTION TO WATER WAVE PHENOMENA**

Basic equations and approximation; equations of motion and energy balance. Solution for "small" waves, including linear theory. Applications: waves on currents, ship waves, refraction problems. Other topics include: waves in shallow water, infinitely deep water, waves on beaches, hydraulic jumps. (Prerequisite: 345) K(3-0)

**MECH 443 (1½) COMBUSTION ENGINEERING**

Introduction to combustion fundamentals, phenomena and applications. Review of chemical thermodynamics. Introduction to chemical kinetics. Transport phenomena and conservation equations for chemically reacting multicomponent systems. Premixed and diffusion flames. Ignition and extinction. Pollutant formation and control. Environmental concerns over combustion processes. (Prerequisite: 395) S(3-1)

**MECH 445 (1½) CRYOGENIC ENGINEERING**

Cryogenics: definition and applications. Refrigeration and liquefaction cycles — cascade, Linde, Claude and Collins cycles; liquefaction of air, hydrogen and helium. Regenerative refrigeration cycles — Stirling, Gifford-McMahon cycles and their derivatives. Magnetic refrigeration — Carnot, Ericsson and AMR processes; applications to liquefaction of natural gas and hydrogen. Refrigeration below 1K — dilution refrigerator, adiabatic demagnetization. Thermoelectric, thermoelastic and non-conventional refrigeration methods. (Prerequisite: 390) S(3-0)

**MECH 447 (1½) ENERGY SYSTEMS**

Energy resources, production, infrastructures, services and demand; source-to-service pathways; energy-economy-environment interaction; and dynamics of technology change. (Prerequisite: 390) K(3-0)

**MECH 450 (1½) SPECIAL TOPICS COURSES**

Special topics courses may be arranged with approval of the Chair of the Department. (Prerequisite: The student must be registered in term 4A or 4B) KS(3-0)

**MECH 455 (1½) INSTRUMENTATION**

Measuring fundamental properties: transducers for measuring position, velocity and acceleration, fluid flow, temperature, pressure. Initial signal conditioning and problems: noise, shielding, bridges, passive filtering. Operational amplifiers, integrators, differentiators. Analog to digital conversion and digital to analog conversion. Actuators for controlling position, velocity and acceleration. Microprocessor applications. (Prerequisite: ELEC 365) S(3-3\*-1)

**MECH 460 (1½) COMPUTER AIDED MANUFACTURE**

Review of common manufacturing processes and the organization of the manufacturing unit; manufacturing processes aided by computers; numerically controlled machine tools; numerically controlled part programming; machining of doubly curved surfaces; computerized numerically controlled tools and adaptive control systems; industrial robots; application of CAD/CAM in engineering and medicine. (Prerequisites: 245 and 410) S(3-1½)

**MECH 461 (1½) PLASTICITY AND MANUFACTURING PROCESSES**

Plastic behaviour of materials, criteria of flow, extremum principles, slip line field solutions; application to drawing, extrusion, hot and cold rolling, forging, sheet metal forming and metal cutting; process design and control. (Prerequisite: 320) S(3-0)

**MECH 462 (1½) SMALL BUSINESS ORGANIZATION**

Finance, accounting, auditing, taxation, marketing, market research; organizational psychology, personnel selection; engineering economy, equivalent uniform annual cash flow, present worth, cost benefit ratio. (Prerequisite: ENGR 280) K(3-0)

**MECH 465 (1½) SENSORS FOR INDUSTRY**

Theory and application of modern sensors including laser, optical, inductive, piezo-electric, ultrasonic and microwave. Role of sensors and control technology in computer-integrated-manufacturing; advanced sensor applications in production and manufacturing; sensors in flexible manufacturing; economic and social considerations; networking of sensors; transportation; smart structures in aeronautical and civil applications. Specific sensors examined include proximity, pressure, strain, electric current, surface roughness, infra red, fibre optic, and gyroscopic. (Prerequisites: 330, PHYS 125) S(3-1)

**MECH 470 (1½) APPLIED THEORY OF ELASTICITY**

Review of analysis of stress and strain; constitutive relations for linear elasticity; two dimensional problems in rectangular coordinates and polar coordinates; general theorems; torsion; bending; thermal stress problems; energy methods. Problems in beam theory, beams on elastic foundation, some problems in elastic stability; introduction to plate theory; axially symmetric problems of cylindrical shells. (Prerequisite: 320) K(3-0)

**MECH 475 (1½) MECHANICS OF FLIGHT**

Description of the atmosphere as it relates to flight. Generation of lift; highlift devices. Generation of drag; drag reduction devices. The production of thrust - piston engines, propellers, gas turbine engines. Takeoff and landing. Climbing flight, aircraft range, steady turns. Aircraft equations of motion. Introduction to the stability and control of aircraft. (Prerequisites: 242 or 245 and 392) S(3-1)

**MECH 480 (1½) ADVANCED CONTROL THEORY**

State-space representation of dynamic systems, linear system dynamics, state transition matrices, canonical forms. Controllability and observability, shaping the dynamic response, linear observers. Compensator design, linear quadratic optimal control. (Prerequisite: 380) S(3-0)



**MECH 485 (1½) MECHANISM AND MANIPULATOR SYNTHESIS**

Synthesis of mechanisms for function generation and rigid body guidance. Graphical, analytical, and optimization based methods of synthesis. Mechanism cognates, Chebychev spacing, Burmister curves. Manipulator joint layout synthesis for spatial positioning and orientation. Application to serial, parallel and hybrid configurations. Conditions of singularity and uncertainty. (*Prerequisite*: 335) S(3-0)

**MECH 490 (1½) UNDERWATER ACOUSTICS**

General acoustical properties of oceans. Acoustical wave generation, transmission and reflection. Radiation of sound power, ray tracing and absorption. Acoustic signal data processing. Sonar systems and equations, transducer characteristics and arrays. Sea floor measurements and long distance sound propagation. (*Prerequisite*: 345) K(3-1)

**MECH 491 (1½) WAVE FORCES ON OFFSHORE STRUCTURES**

Review of the basic equations and concepts. Flow separation and time-dependent flows. Wave theories. Wave forces on small bodies — force coefficients. Marine risers. Wave impact loads. Wave forces on large bodies. (*Prerequisite*: 345) S(3-0)

**MECH 495 (1½) COMPUTATIONAL FLUID DYNAMICS AND HEAT TRANSFER**

Methods of predictions and historical perspective; governing differential equations of heat transfer and fluid flow; finite difference methods; discretization schemes; application to heat conduction problems; introduction to control volume formulation for fluid flow and to turbulence modelling; accuracy and convergence considerations. Individual term projects using a CFD program. (*Prerequisites*: 395 and 392) K(3-1)

**MECH 499 (1½) TECHNICAL PROJECT**

The technical project provides an opportunity for each student to carry out a design project associated with one or more of the higher level courses, under the supervision of a faculty member. The nature of the project selected should be such as to require independent study of current technical literature. When feasible, the design should be assessed in the laboratory. (Each student is to present a complete report at the end of the term.) (*Prerequisite*: The student must be registered in term 4A or 4B) KS(0-6)



# FACULTY OF FINE ARTS

Anthony Welch, B.A. (Swarth.), M.A., Ph.D. (Harv.), Dean of the Faculty

Lynda Gammon, B.A. (S. Fraser), M.F.A. (York), Associate Dean  
Mavor Moore, B.A. (Tor.), D.Litt. (York), Research Professor in Fine Arts

Rosemarie Spahan, B.F.A. (U. of Vic.), Adjunct Lecturer (1994-95)

The Faculty of Fine Arts comprises the Departments of History in Art, Theatre, Visual Arts, and Writing and the School of Music, and offers courses leading to the degree of Bachelor of Arts, in History in Art, Theatre and Writing; Bachelor of Music; Bachelor of Fine Arts, in Theatre, Visual Arts and Writing.

Certain courses in the Faculty of Fine Arts carry unrestricted credit in the Faculty of Arts and Science, and other courses may be chosen in keeping with the free elective regulation of that Faculty.

Students in the Faculty of Education may register for credit in any course offered by the Faculty of Fine Arts, provided that space is available and that they have the prior approval of the Education Advising Centre.

Graduate work is offered in Music, History in Art, Theatre and Visual Arts. (See section of Calendar on Faculty of Graduate Studies for details of programs and degrees.)

## Cooperative Education Program

Please refer to page 38 of the Calendar for a general description of Cooperative Education.

In the Faculty of Fine Arts, a Cooperative Education program is offered by the Department of Writing. A similar option is offered by the Departments of History in Art, Music, Theatre and Visual Arts through the Arts Co-operative Education Program.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. As a required part of the program, students are employed for specific Work Terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

Students may withdraw from the Cooperative Education Program at any time and remain enrolled in a degree program offered by the Department.

Details of the program in the Department of Writing are outlined on page 252 of the Calendar.

Details of the Arts Cooperative Education Program are outlined on page 227.

## Qualifications for Admission

Applicants seeking admission to the Faculty of Fine Arts are governed by the regulations that appear on pages 9-13.

See additional requirements for Music, Theatre, Visual Arts and Writing in the chart on page 10 and in the departmental entries.

Because of limited space and resources in some programs, not all qualified candidates can be admitted; early application is therefore highly desirable.

Students from other faculties should note that enrollment in certain courses may be limited and preference given to students registered in the Faculty of Fine Arts. Consult the department or school for specific information.

## Second Bachelor's Degree

Students wishing to complete a second bachelor's degree should proceed as outlined on page 23.

## General Regulations

Calendar regulations governing registration, fees, and academic advancement (see pages 17-23), apply to all students registered in the Faculty of Fine Arts. Special regulations are set out under the departmental entries.

## Academic Advice

Students entering the Faculty for the first time should consult departmental offices for advice about course planning. If possible, this should be done before registration.

All students in the Faculty of Fine Arts are required to complete a Record of Degree Program form in consultation with their department/school preferably near the beginning of their third year of studies. The purpose of this form is to ensure that proposed courses will meet the requirements for the degree program selected. A copy of this form is placed on file in the Records Office to be used as a record for graduating purposes.

All students registered in the Faculty of Fine Arts who intend eventually to enter the teaching profession should notice the admission requirements of the programs of the Faculty of Education. These requirements must be kept in mind in the choice of academic electives in all undergraduate degree programs.

Questions about academic planning in Fine Arts that do not relate to any specific departmental program can be referred to the Dean's Office in Room 116, Fine Arts Building.

## Degree Requirements in the Faculty of Fine Arts

Each candidate for a bachelor's degree is required:

- to have satisfied the University English requirement (see page 15);
- to present credit in a minimum of 60 units of university level courses numbered 100 and above; at least 30 of these 60 units must normally be University of Victoria courses;
- to include in these 60 units a minimum of 21 units of courses numbered at the 300 and 400 level; at least 18 of the 21 upper level units should normally be University of Victoria courses;
- to meet the specific program requirements prescribed by the Faculty for the student's declared degree program (see department/school for specifics).

## Interdepartmental Double Honours or Major

A student in one department in the Faculty of Fine Arts may concurrently satisfy the requirements of a program in a second department by completing the program requirements in the second area with the permission of both departments. Only one degree will be awarded. For example, a student majoring in History in Art may concurrently satisfy the requirements for the program in Visual Arts and thereby qualify for a B.A. with a Double Major in History in Art and Visual Arts. Conversely, a student majoring in Visual Arts may concurrently satisfy the requirements for the program in History in Art and thereby qualify for a B.F.A. with a Double Major in Visual Arts and History in Art. Students interested in taking a double honours or major program should consult the departments concerned.

In any case where two different classes of degree result, each class shall be tied to the respective discipline instead of the degree, and shall be shown in the student's academic record.

## Minors

In the Faculty of Fine Arts, minors are available in two programs which are offered jointly by Fine Arts and Arts and Science. These minors are The Arts of Canada, and Film Studies. A student in a major or honours program in the Faculty of Fine Arts may undertake a minor in either of these two programs.

## Film Studies Minor

Students wishing to declare a minor in Film Studies should contact the director of Film Studies in the Department of History in Art for application procedures. Students in this program are required to take the 3-unit History in Art 295, Introduction to Film Studies, plus nine units of courses selected from the list below.

|         |      |      |                                |
|---------|------|------|--------------------------------|
| English | 413  | (1½) | Studies in Film and Literature |
|         | 414  | (1½) | American Film                  |
|         | 415  | (1½) | Special Studies in Film        |
| French  | 389A | (1½) | French Cinema                  |
|         | 389B | (1½) | Quebec Cinema                  |
|         | 389C | (1½) | Special Studies in Cinema      |
| German  | 439  | (1½) | The New German Cinema          |
|         | 433  | (1½) | The German Novel and Film      |



|  |               |   |   |  |  |  |
|--|---------------|---|---|--|--|--|
| History  | 389A          | Cinema and European Society, 1900-45                          | *480 (1½ or 3)  | Topics in 20th Century Native North American Art |  |  |
| Italian  | 485 (1½)      | Italian Film  | *482 (1½)   | Special Studies in Tribal Arts                   |  |  |
| Spanish  | 485 (1½)      | Spanish Film  | 324 (1½ or 3)   | Music in Canada                                  |  |  |
| Russian  | 304 (1½)      | Literature and Cinema in the U.S.S.R.                         | 414 (1½)  | Studies in Canadian Theatre and Drama            |  |  |
| History in Art   | 311 (1½)      | Women and Television  | <p>*Because the topic of this course varies from year to year it must be approved by the Associate Dean of Fine Arts for credit towards an Arts of Canada Program.</p> <p><b>Interfaculty Programs:</b></p> <p>Students may arrange for an Interfaculty Double Honours or Major program through the Arts and Science Advising Centre. Such programs involve satisfying the Honours or Major requirements of two disciplines in two different Faculties. Agreement to details of all such programs must be signed by the students and by representatives of the academic units involved. Students on the interfaculty program will be subject to the regulations of the Faculty in which they are registered.</p> <p>Only one B.A. degree with a Double Major, a Double Honours or a Joint Major/Honours will be awarded on the recommendation of the Faculty in which the student is registered.</p> <p>Students in a Major or Honours Program may also arrange to undertake a Minor in the Faculty of Arts and Science (see Minor, page 43). Particular attention is drawn to the Medieval Studies Program (see page 128) and to the Department of Women's Studies in that Faculty (see page 159).</p> <p>In any case where two different classes of degree result, each class shall be tied to the respective discipline instead of the degree, and shall be shown in the student's academic record.</p> <p><b>Credit for Studies Taken at Other Postsecondary Institutions</b></p> <p>Students who plan to undertake work at other institutions must receive prior approval from the Dean if they wish such courses to be credited towards a degree program in the Faculty of Fine Arts. This applies particularly to courses at the 300 and 400 level and to courses which are included in the last 15 units of a degree program. Upon successful completion of such work, the student must request the Registrar of the other institution to send an official transcript of record to Records Services of the University of Victoria.</p> <p>Students authorized to attend another institution who accept a degree from that institution abrogate their right to a University of Victoria degree until they have satisfied the University's requirements for a second bachelor's degree.</p> <p><b>Pre-Architecture Planning</b></p> <p>Since Canadian Architectural programs vary widely in their prerequisites for admission, undergraduates interested in future careers in architecture, urban planning, or landscape architecture are urged to write for this essential information to the School of Architecture they are interested in entering.</p> <p>Generally, all programs emphasize the need for balance and diversification of academic background and for competence in English, Mathematics, and Physics; some programs require a portfolio of graphic work to demonstrate ability.</p> <p>For advice on course selection, those students planning an architectural degree should consult the Associate Dean, Faculty of Fine Arts, or the Advising Centre, Faculty of Arts and Science.</p> |  |  |  |
|  | 312 (1½)      | Women and Film  |   |  |  |  |
|  | 363 (1½)      | The Cinema and Modern Art Movements                           |   |  |  |  |
|  | 364 (1½)      | Documentary Film  |   |  |  |  |
|  | 365 (1½)      | Experimental Art and Film                                     |   |  |  |  |
|  | 366 (1½)      | Introduction to History in Cinema                             |   |  |  |  |
|  | 367 (1½)      | History in Cinema   |   |  |  |  |
|  | 467 (3)       | Representing Differences: (Selves and Others in Film)         |   |  |  |  |
|  | 478 (1½)      | Popular Culture Theory and Criticism                          |   |  |  |  |
| Writing  | 312 (1½)      | Structure in Cinema and Television Drama                      |   |  |  |  |
|  | 412 (1½)      | Recurrent Themes in Film                                      |   |  |  |  |
| <b>The Arts of Canada Minor</b>  |               |   |   |  |  |  |
| Students wishing to declare a minor in Arts of Canada should contact the Associate Dean of Fine Arts. Students in this program are required to take the 3-unit introductory course FA 225 (ACAN 225), plus nine units of 300 and 400 level courses representing at least three different areas selected from the list below. |               |   |   |  |  |  |
| English  | 202 (3)       | An Introduction to Canadian Literature                        |   |  |  |  |
|  | 448 (1½)      | Special Studies in Canadian Literature                        |   |  |  |  |
|  | 450 (1½)      | Modern Canadian Fiction: I                                    |   |  |  |  |
|  | 451 (1½)      | Modern Canadian Fiction: II                                   |   |  |  |  |
|  | 452 (1½)      | Modern Canadian Poetry: I                                     |   |  |  |  |
|  | 453 (1½)      | Modern Canadian Poetry: II                                    |   |  |  |  |
|  | 457 (3)       | Traditions in Canadian Literature                             |   |  |  |  |
|  | 458 (1½)      | Comparative Studies in French and English Canadian Literature |   |  |  |  |
|  | 459 (1½)      | Early Canadian Prose Literature                               |   |  |  |  |
| Fine Arts  | 315 (1½ or 3) | Introduction to Canadian Cultural Policy                      |   |  |  |  |
|  | 325 (1½ or 3) | Issues in Contemporary Culture                                |   |  |  |  |
|  | 360 (1½ or 3) | Introduction to Issues in Arts Criticism                      |   |  |  |  |
| French   | 389B (1½)     | Quebec Cinema   |   |  |  |  |
|  | 480 (1½)      | The French-Canadian Novel from Origins to the Modern Period   |   |  |  |  |
|  | 482 (1½)      | Contemporary French-Canadian Novel                            |   |  |  |  |
|  | 484 (1½)      | Contemporary French-Canadian Theatre                          |   |  |  |  |
|  | 485 (1½)      | French-Canadian Poetry  |   |  |  |  |
|  | 487 (1½)      | English 458   |   |  |  |  |
|  | 488D (1½)     | French-Canadian Literature Outside Quebec                     |   |  |  |  |
| History in Art   | 368A (1½)     | History of Early Canadian Art                                 |   |  |  |  |
|  | 368B (1½)     | History of Twentieth Century Canadian Art                     |   |  |  |  |
|  | 382A (1½)     | Native North American Arts                                    |   |  |  |  |
|  | 384 (1½)      | Arts of the Northwest Coast                                   |   |  |  |  |
|  | 468 (1½)      | Special Studies in Canadian Art                               |   |  |  |  |

## INTERDISCIPLINARY COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### \*FA 225 (ACAN 225) (3) INTRODUCTION TO THE ARTS OF CANADA

An interdisciplinary examination of Canada's cultural identity and of current issues facing the arts in both French- and English-speaking Canada. Topics to be considered include aboriginal arts, theatre, history in art, visual and literary arts, music, multiculturalism, broadcasting and cultural policies. Y(3-0)

### FA 290 (1½ or 3) FINE ARTS STUDIES OFF CAMPUS

An introductory course in the art or heritage of a city, region or culture. To be offered in the appropriate location; this course will be conducted under the direction of a faculty member from the Faculty of Fine Arts. The course may be taken for credit more than once under different topics and in different locations. (Prerequisite: As specified from year to year, or permission of the Course Director) NO(3-0)



**\*FA 300 (1½ or 3) INTERDISCIPLINARY STUDIES**

A course emphasizing an interdisciplinary approach to contemporary artistic concerns. In each year, course work will focus on a particular issue. (*Prerequisite:* At least second year standing. Additional prerequisites may be required for some topics) NO(3-0)

**\*FA 315 (1½ or 3) INTRODUCTION TO CANADIAN CULTURAL POLICY**

An examination of Canadian cultural policy since the 1940s, in the context of international practice, with emphasis on its relationship to Canadian national identity. Topics to be considered will include the controversial role of governments in pursuit of cultural policies, the significance of Federal granting councils, the changing role of corporate patronage, and the economic impact of the arts. NO(3-0)

**\*FA 325 (1½ or 3) ISSUES IN CONTEMPORARY CULTURE**

An interdisciplinary course focussed on creative writing, film, history in art, music, theatre, visual arts, and cultural policies in 20th century Canada. NO(3-0)

**\*FA 335 (1½ or 3) POPULAR CULTURE**

An interdisciplinary examination of the popular arts and their place in society. The topics for examination will vary in different years and sections. Students may take this course for credit more than once, in different topics. (*Prerequisite:* At least second year standing) K(3-0)

**\*FA 345 (1½ or 3) THE ARTS AND TECHNOLOGY: I**

A study of the application of contemporary technology to the arts. The topics for consideration may vary in different years and sections. Students may take this course for credit more than once, in different topics. (*Prerequisite:* At least second year standing. Additional prerequisites may be required for some topics) K(3-0)

**\*FA 346 (1½ or 3) THE ARTS AND TECHNOLOGY: II**

A study of the application of contemporary technology to the arts. The topics for consideration may vary in different years and sections. Students may take this course for credit more than once, in different topics. (*Prerequisite:* At least second year standing. Additional prerequisites may be required for some topics) NO(3-0)

**\*FA 355 (1½ or 3) SEMINAR IN ARTS MANAGEMENT**

An introduction to selected key aspects of management, promotion and funding of arts organizations. The topics for consideration may vary in different years and sections. Students may take this course for credit more than once in different topics. (*Prerequisite:* At least second year standing in Fine Arts) SK(2-2)

**\*FA 356 (1½ or 3) MANAGEMENT SKILLS FOR THE ARTIST**

This is a practical course designed to instruct students in fundamental management skills which will be of use for those anticipating careers

as artists. Topics will include presentation techniques, fundraising methods, accounting procedures, grant applications, media relations and event planning. (*Prerequisite:* At least second year standing in Fine Arts) K(3-0)

**\*FA 360 (1½ or 3) INTRODUCTION TO ISSUES IN ARTS CRITICISM**

An introduction to selected methods and major issues in the history and practice of criticism, both learned and journalistic, in and of the visual, performing and literary arts. Topics examined may include the historic and modern aims of the critic, social roles of the critic, different critical methodologies, problems in critical interpretation, and techniques of critical writing. Depending on content, this course may be taken more than once. (*Prerequisite:* Second year standing and permission of the instructor) Y(1-1½)

**FA 365 (1½ or 3) DANCE WORKSHOP: I**

An intensive practical introduction to the techniques of a specific style of dance. The style of dance to be introduced may vary in different terms and sections. Students may take this course for credit more than once, in different styles. (*Prerequisite:* Previous experience in dance, and the permission of the instructor) K(3-0)

**FA 366 (1½ or 3) DANCE WORKSHOP: II**

An intensive practical introduction to the techniques of a specific style of dance. The style of dance to be introduced may vary in different terms and sections. Students may take this course for credit more than once, in different styles. (*Prerequisite:* Previous experience in dance, and the permission of the instructor) K(3-0)

**FA 367 (1½ or 3) DANCE WORKSHOP: III**

An intensive practical introduction to the techniques of a specific style of dance. The style of dance to be introduced may vary in different terms and sections. Students may take this course for credit more than once, in different styles. (*Prerequisite:* Previous experience in dance, and the permission of the instructor) K(3-0)

**FA 390 (1½ or 3) FINE ARTS STUDIES OFF CAMPUS**

An introductory course in the art or heritage of a city, region or culture. To be offered in the appropriate location; this course will be conducted under the direction of a faculty member from the Faculty of Fine Arts. The course can be taken for credit more than once under different topics and in different locations. (*Prerequisite:* As specified from year to year, or permission of the Course Director) NO

**FA 399 (1½ or 3) DIRECTED STUDIES IN FINE ARTS**

Individual research in Fine Arts taken under the supervision of a faculty member. Permission of faculty member supervising the project and approval of the Associate Dean. Y(3-0)

## ARTS COOPERATIVE EDUCATION PROGRAM

Norah I. McRae, B.A., M.B.A. (Alta.), Coordinator

The Arts Co-operative Education Program is a year-round program which, through work terms of employment in a variety of organizations, enables students to combine work experience with an education in the fine arts and humanities.

To qualify for admission into the Arts Coop Program, a student must be proceeding to an Honours or Major B.A., B.F.A. (other than Writing) or B.Mus. degree in the Faculty of Fine Arts. In addition, a student must be registered in at least fifteen units of course work and must have achieved at least a 5.00 Grade Point Average in first year. A formal interview to determine the student's interests, abilities and aptitudes will be required before admission.

To continue in the program, a student must be a full time student enrolled in a program leading to an Honours or Major B.A. or B.F.A. degree as listed in the previous paragraph, and must maintain a G.P.A. of at least 5.50 in the courses in the major area, and at least a 5.00 average overall.

To receive the Coop notation on graduation, a student must complete at least 9 units of approved Arts Coop courses (see below), must complete satisfactorily the Work Term Preparation Seminars prior to the first Work Term, and must perform satisfactorily in each of at least four Work Terms. Details of Work Terms are recorded on the Record of Work Terms which is attached to the student's academic record and transcript.

The Arts Coop Program is designed to provide students with an academic background and certain skills appropriate to a wide range of careers. In particular, students will be required to select a program of studies intended to ensure that they

- are capable of clear and precise oral and written communication in English
- acquire some understanding of management practice and the Canadian financial system
- are aware of the Canadian historical and political context
- are aware of the social impact of science and technology, with particular emphasis on computing.



A student's selection of Arts Coop courses will be approved by both the Arts Coop Coordinator and the responsible Departmental Adviser.

### COURSES

Students must complete a minimum of 9 units, not forming part of the requirements for the student's Major or Honours program. The nine units should normally be completed by the end of third year, and are to be taken as electives, and form part of the 60 units of credits required for graduation. They must be selected from the following list:

|               |  |
|---------------|--|
| CSC 100 (1½)  | Elementary Computing                         |
| COMM 220 (1½) | Organizational Behaviour                     |
| ECON 100 (1½) | The Canadian Economy - Problems and Policies |

|                  |                                       |
|------------------|---------------------------------------|
| FA 315 (1½ or 3) | Canadian Cultural Policy              |
| FA 355 (1½)      | Seminar in Arts Management            |
| HIST 130 (3)     | History of Canada                     |
| PHIL 201 (1½)    | Applied Logic: I                      |
| or               |                                       |
| PHIL 203 (1½)    | Applied Logic: II                     |
| PHIL 220 (1½)    | Introduction to Philosophy of Science |
| POLI 470 (3)     | Government in Canada                  |
| WRIT 100 (3)     | Introduction to Creative Writing      |

Applications and further information about the Arts Co-operative Education Program may be obtained from the Arts Co-op Coordinator in the Office of Co-operative Education Programs.

## DIPLOMA IN FINE ARTS

The Diploma Program in Fine Arts is designed for members of the community who must balance academic study with jobs, families, or community responsibilities. It is open to any member of the community with a commitment to University level study. Applicants should normally have completed an undergraduate degree.

The Program is not appropriate for those wishing an emphasis on studio or performance areas. Rather, it stresses intellectual values of the creative and liberal arts. It is an innovative, interdisciplinary program that is unique in Canada.

The Fine Arts Diploma Program is an extension program of the Faculty of Fine Arts, and completion of the program will lead to a Diploma in Fine Arts awarded under the authority of the Senate of the University of Victoria. The Program offers participants the choice of eleven different themes of study:

- 1) The Idea of the Fine Arts
- 2) History of the Fine Arts
- 3) World Architecture
- 4) The Middle Ages
- 5) Renaissance and Baroque
- 6) Modernism
- 7) Canada
- 8) The Mediterranean
- 9) Asia and the Pacific Rim
- 10) Cross Cultural Studies in Ancient Arts
- 11) Individual Study Program

Each of these themes requires the completion of 18 units of course credits on a full or part time basis, normally within five years.

For further information about the Program and for academic planning, please contact the Associate Dean of Fine Arts.

## DEPARTMENT OF HISTORY IN ART

Carol Gibson-Wood, B.A. (W. Ont.), M.A. (Brit. Col.), M.A. (W. Ont.), Ph.D. (Warburg Inst., Lond.), Associate Professor (Lansdowne Chair in the Fine Arts) and Chair of the Department

John L. Osborne, B.A. (Car.), M.A. (Tor.), Ph.D. (Lond.), Professor

S. Anthony Welch, B.A. (Swarth.), M.A., Ph.D. (Harv.), Professor

Kathlyn Liscomb, B.A. (Tufts), M.A., Ph.D. (Chicago), Associate Professor

Elizabeth Tumasonis, B.A. (Coll. of Wm. and Mary), M.A. (N.Y.U.), Ph.D. (Calif., Berk.), Associate Professor

Victoria Wyatt, B.A. (Kenyon Coll.), M.A., M.Phil., Ph.D. (Yale), Associate Professor

Catherine D. Harding, B.A. (McG.), Ph.D. (Lond.), Assistant Professor

Lianne M. McLarty, B.A. (Brock), M.A. (Car.), Ph.D. (S. Fraser), Assistant Professor

Christopher A. Thomas, B.A. (York), M.A. (Tor.), Ph.D. (Yale), Assistant Professor

Astri Wright, B.A., M.A., Ph.D. (Cornell), Assistant Professor

### Visiting, Adjunct and Cross-listed Appointments:

Martin J. Segger, B.A., Dip.Ed. (U. of Vic.), M.Phil. (Warburg, Lond.), F.R.S.A., Adjunct Associate Professor (1993-95)

Ariane Isler de Jongh, B.A., Ph.D. (Montr.), Adjunct Assistant Professor (1993-95)

Gillian Mackie, B.A., M.A. (Oxon.), B.A., M.A., Ph.D. (U. of Vic.), Adjunct Assistant Professor (1993-95)

Nancy Micklewright, B.A., M.A., Ph.D. (Penn.), Visiting Associate Professor (1993-96)

Judith Patt, B.A. (Stan.), M.A., Ph.D. (Calif., Berk.), Adjunct Assistant Professor (1993-95)

### GRADUATE PROGRAM

For information on the studies leading to the M.A. Degree, see page 338.

### B.A. DEGREE PROGRAMS

#### 1. B.A. Major Program in History in Art

In addition to the general University requirements for graduation (see page 23), students taking a major in History in Art must satisfy the following requirements:

1. Successful completion of 21 units of History in Art courses, of which at least 15 units must be at the 300 or 400 level.
2. These 15 upper level units must include 3 units in each of the three following areas of study: 1) Classical, European before the modern period; 2) Islamic, Asian; 3) Art of the Americas, modern art and architecture.

Students wishing to declare a major in History in Art should contact the department's undergraduate adviser for program approval.

#### 2. MUSEUM STUDIES

An important resource for the History in Art program is the Maltwood Art Museum and Gallery located at the University of Victoria. The Museum administers the Maltwood Collection (an international collection of decorative arts including special emphasis on the Arts and Crafts movement from William Morris to the 1920s) and the University Collection (an extensive collection of western Canadian contemporary art in all media).

The specialized museological library, study gallery, and varied exhibition programs give students a chance to work directly with materials and have firsthand experience in the operations of a University Museum.

#### 3. B.A. HONOURS PROGRAM IN HISTORY IN ART

##### 3.1 Admission to the Honours Program

The honours program provides the possibility for more intensive study in the field of History in Art, and is intended for those who wish



to continue on to graduate studies in History in Art or related professional disciplines.

Students may apply to enter the honours program after the completion of a minimum of nine units of course work in History in Art with a G.P.A. in these courses of 5.00(B) or better. Normally this would be done at the end of the second year.

### 3.2 Honours Program Requirements

To graduate with a B.A. Honours in History in Art a minimum of 30 units of credit in the Department will be required (out of a total degree program of 60 units). 21 of these units must be at the 300/400 level and should be chosen in consultation with the Honours Adviser. These upper level courses must include:

- (a) 3 units to be selected from the fields of Classical art or European art before the modern period;
- (b) 3 units to be selected from the fields of Asian or Islamic art;
- (c) 3 units to be selected from the fields of modern art or the art of the Americas;
- (d) 3 additional units of non-Western art;
- (e) 499 (3 units)
- (f) 6 units of History in Art electives.

### 3.3 Honours Language Requirement

Before graduation each student will be required to demonstrate a reading knowledge of a language other than English appropriate to the area of special interest. Normally this requirement will be satisfied by completion of a 200 level language course with at least second class standing. (French 181/182, French 300, and German 390 are also acceptable.) In special circumstances, permission may be sought to take a translation examination administered by the Department.

#### Standing at Graduation

A "with Distinction" honours degree requires a graduating average of 6.50 or higher, as well as an average of 6.50 or higher in all courses taken in the Department at the 300 and 400 level. Third year students whose performance in the honours program falls below a grade point average of 3.50 will be required to transfer to the major program at the beginning of their fourth year. Fourth year students whose graduating average, or whose average in courses taken in the Department at the 300 and 400 level, is below 3.50, but who otherwise meet the University requirements for graduation, will receive a B.A. with a Major in History in Art.

## 4. PROGRAM OF ADVANCED STUDIES IN CULTURAL RESOURCE MANAGEMENT

### 4.1 Program Description

The Program of Advanced Studies in Cultural Resource Management offers a postgraduate Diploma in Cultural Conservation. The Program serves those who are currently employed professionally in museums, art galleries, historic sites, building conservation, performing arts and related settings.

The curriculum of the Diploma Program in Cultural Conservation features two areas of specialization: Museum Studies and Architectural Conservation and Cultural Management. However, a candidate may register for courses in all areas in order to obtain credit towards the Diploma.

### 4.2 Academic Regulations

Applicants must have completed a University of Victoria Bachelor's degree or its equivalent.

The program may be completed in a minimum of one calendar year. The normal period of completion is two to three years of part time study. The program must be completed within five years.

Program: (18 units)

- (a) Core courses: 486 (3), 487 (3).
- (b) Special Topics: 9 units from 488 A-M (1½) and/or 489 A-H (1½).
- (c) Directed Studies or Internship: 490 (3) or 491 (3).

Applicants who have previously received credit for any of these courses (or their equivalents) will be allowed to substitute up to six units of courses recommended by the Program's Advisory Committee.

Students may apply to obtain up to six units of transfer credit for equivalent courses or certified training.

Diploma students who fail to maintain at least a grade point average of 5.00 may be asked to withdraw from the program.

Students enrolled in the Diploma in Cultural Conservation may not normally apply credit for any course towards a degree program, e.g., B.A., B.F.A., M.A. Other students may register in individual courses in the Diploma Program as enrollment allows.

Please direct all inquiries to:  
Program of Advanced Studies in Cultural Resource Management  
Division of Continuing Studies  
University of Victoria

## 5. COOP PROGRAM

The Department of History in Art participates in the Arts Cooperative Education program (see pages 49 and 227). Applications and further information may be obtained from the Office of Cooperative Education.

## UNDERGRADUATE COURSES

Courses numbered 300 or higher are normally not offered to first year students.

Only a selection of the following courses can be offered in any particular year. Students taking 400 level courses are warned that a good background knowledge of the subject will be assumed.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = not offered, this session)

### \*H A 120 (3) INTRODUCTION TO WORLD HISTORY IN ART

An introductory survey of the visual remains of many of the world's cultures from prehistory to the present day. (Preference in registration given to first and second year students) Y(2-0-1)

### H A 221 (1½) THE CHRISTIAN TRADITION IN WESTERN ART AND ARCHITECTURE

This course will focus on the social production of art and architecture in relation to the Christian systems of thought. Although the specific periods and topics covered may vary depending on the instructor, the course will cover issues such as: the relationship of word and representation; the study of Christian iconography; the role of the liturgy; art forms as instruments and expressions of religious change. NO(3-0)

### \*H A 222 (1½) THE CLASSICAL TRADITION IN WESTERN ART

An introduction to the influence of Greco-Roman artistic traditions on subsequent periods of European civilization. The classical inheritance in terms of both style and iconography will be examined in a variety of selected monuments from the Middle Ages through to the 20th century. S(3-0)

### \*H A 223 (1½ or 3) INTRODUCTION TO WESTERN ARCHITECTURE

An introduction to the aims and methods of architectural history using case-studies of monuments from the history of Western architecture from archaic Greece to the present. Issues considered can include: changing patterns of patronage; shifts in building-types, features, and structural systems; and influential theories of design. F(3-0)

### \*H A 230 (1½) MONUMENTS OF SOUTH AND SOUTHEAST ASIA

An introduction to Primal, Hindu, Buddhist, and Islamic world views through the study of central religious monuments of South and Southeast Asia. The philosophical and religious principles underlying the architecture, painting and sculpture programs and the ritual, ceremonial, and political dimensions of each monument will be examined. Emphasis will be on learning to formulate ideas and develop writing skills adequate to Asian art history. S(3-0)

### \*H A 231 (3) THE GREAT CULTURES OF ASIA

A survey of Asian art and architecture from 3500 B.C. to the 20th century from the Mediterranean to the Pacific. The course has several particular emphases: the major Asian religions and their arts; secular patronage by the ruling classes; the function of the arts in their societies; and the cultural interconnections between civilizations. NO(3-0)

### \*H A 250 (HIST 250) (1½) MIDDLE EASTERN CIVILIZATION: THE ANCIENT WORLD

A survey of the art and architecture of the ancient Near East and Egypt from the fourth millennium B.C. to the seventh century A.D. The art and architecture of the many cultures of the ancient Near East are presented in the context of important political events; the relationships between religion, history, literature and art are given particular attention. F(3-0)



**\*H A 251 (HIST 251) (1½) MIDDLE EASTERN CIVILIZATION: ISLAM**

A survey of the art and architecture of the Islamic world, beginning with the rise of Islam in the seventh century and continuing into the nineteenth century. The primary emphasis of the course is on the architectural monuments and objects of the Islamic world, and on gaining an understanding of Islamic society. The political history of the Islamic Middle East provides a chronological framework for the study of art and architecture.

S(3-0)

**\*H A 260 (3) PAINTING AND SCULPTURE IN EUROPE SINCE 1750**

A general introduction to European painting and sculpture from 1750 to the present day including a brief survey of related developments in North America since 1945. The course will survey such movements as Neoclassicism, Romanticism, Realism, Impressionism, Cubism, Fauvism, Expressionism, Constructivism, and Surrealism. Lectures combine formal and contextual analysis, with emphasis on cultural context.

NO(3-0)

**\*H A 262 (3) ART BY WOMEN**

A comprehensive study of women's art through history. The course will include an examination of art forms traditionally associated with women, for example, tapestry, weaving, embroidery and pottery, as well as the art of individual women painters, sculptors, photographers and printmakers.

NO(3-0)

**\*H A 270 (1½) RELIGION, PHILOSOPHY, AND THE ARTS IN CHINA AND JAPAN**

This course introduces students to major religions and philosophies of China and Japan by exploring how values and beliefs were conveyed in the art. It is not a chronological survey of Chinese and Japanese art.

F(3-)

**H A 280 (1½ or 3) INTRODUCTION TO THEMES IN INDIGENOUS ARTS**

A comparative introduction to themes central to the study of indigenous arts, exploring similarities and differences in art forms from various cultures. Themes discussed may include topics such as the following: functional arts; ceremonial arts; specific art genres; spirituality and art; environment and art; roles of artists in society; contemporary arts. Regions and cultures studied will vary from year to year.

S(3-0)

**\*H A 295 (3) INTRODUCTION TO FILM STUDIES**

This course covers a range of historical periods, cinematic practices and theories that have emerged to explain both film and its relationship to the social world. Emphasis will be placed on critical, analytical readings of selected films. This course involves a 3 hour lecture/screening and a one hour tutorial a week.

Y(3-1)

**\*H A 310 (1½ or 3) MEDIA AND METHODS**

An examination of the techniques used by artists throughout history, in western and nonwestern cultures. Areas of special emphasis may include painting, drawing, sculpture, photography, printmaking, architecture, and other art forms. The development of art technology is considered in its historical, social, economic, and geographical context. Period or area of emphasis may vary. Course may include lectures, demonstrations, museum and gallery visits. (*Prerequisite:* 120 or permission of the Department)

NO(3-0)

**\*H A 311 (1½) WOMEN AND TELEVISION**

This course focuses on the social context of television production and consumption. It considers competing theories of the media and outlines the varieties of feminist cultural criticism as they pertain to television. Emphasis will be placed on the representations of and viewing by women in different television forms such as soap operas, news, crime dramas, etc. (Preference to third and fourth year students) Intended to be offered in Summer of 94.

NO(3-0)

**\*H A 312 (1½) WOMEN AND FILM**

This course examines representations of women and by women, in a variety of film forms (experimental, documentary, narrative) and within a range of historical periods. Emphasis will be placed on feminist theories of representation, visual pleasure, spectatorship and subjectivity and on analyses of key films. (Preference to third and fourth year students)

F(2-1)

**\*H A 316 (CLAS 371) (1½) ART AND ARCHITECTURE OF ANCIENT GREECE AND THE AEGEAN**

An introduction to art and architecture in Greece and the Aegean from the Early Bronze Age through the Hellenistic period. Architecture, sculpture, and the minor arts are examined as evidence for cultural attitudes towards humankind, the gods, the physical world, and the exploration of form, colour, and movement. Emphasis is placed on the careful discussion of selected monuments illustrated through slides, casts, and photographs. (No prerequisites.) (Not open to students with credit in 315 or CLAS 371)

F(3-0)

**\*H A 317 (CLAS 372) (1½) ART AND ARCHITECTURE OF THE ROMAN WORLD**

A survey of Roman art and architecture relating the political and social development of the Roman people to their artistic expression. After an examination of Etruscan art and architecture for its formative influence on Roman attitudes, Republican and Imperial Roman art are discussed in the context of historical events. Topics include the special character of Roman art, Hellenized and Italic modes of expression, portraiture, historical reliefs, function in art, architectural space and city planning. (No prerequisites.) (Not open to students with credit in 315 or CLAS 372)

S(3-0)

**\*H A 321 (1½) LATE CLASSICAL AND EARLY CHRISTIAN HISTORY IN ART**

An introductory survey of the art and architecture of the Mediterranean world from the origins of Christian art in the 3rd century A.D. to the onset of Iconoclasm in the 8th century. In addition to a detailed examination of surviving monuments and art objects, an emphasis will be placed on the sources of Christian iconography and the relationship between art, theology and liturgy.

F(3-0)

**\*H A 323 (1½) BYZANTINE HISTORY IN ART**

An introductory survey of the art and architecture of the Byzantine empire and its culturally dependent areas from the period of Iconoclasm through to the fall of Constantinople in 1453 and beyond. The emphasis will be on an examination of surviving monuments in Greece, Turkey, southern Italy, the Balkans, and Russia.

S(3-0)

**\*H A 326 (1½) EARLY MEDIEVAL HISTORY IN ART**

An introductory survey of the arts and architecture of western Europe in the period ca. A.D. 600-1150. Topics to be considered will include Anglo-Saxon, Carolingian, Ottonian, and Romanesque history in art.

NO(3-0)

**\*H A 328 (1½) GOTHIC ART AND ARCHITECTURE**

An introductory survey of the art and architecture of western Europe from the reconstruction of St. Denis ca. 1140 to the beginnings of Renaissance art in Florence ca. 1400. The course will focus primarily on architecture in northern Europe and on painting in Italy, with a concentration on artists from the cities of Florence, Rome and Siena.

NO(3-0)

**\*H A 330A (formerly part of 330) (1½) EARLY ARTS OF SOUTH ASIA**

A survey of the arts in South Asia from the Indus Valley Civilization to the 10th century. The development of Hindu and Buddhist art, architecture and patronage is examined in relation to their historical, philosophical and religious backgrounds. Selections from treatises on art and aesthetics are read in translation and basic issues in the study of Indian art in the West form part of the discussion. (Normally to be offered in alternate years with 333 A,B)

NO(3-0)

**\*H A 330B (formerly part of 330) (1½) LATER ARTS OF SOUTH ASIA**

A survey of the arts of South Asia, including the Himalayan region and Tibet, from the eighth century up to the twentieth. Emphasis will be on regional variations in Buddhist and Hindu art, the introduction of new ideas, art forms and styles with the establishment of Islamic rule, and the role of colonialism and nationalism in the formation of the region's modern visual culture. (*Prerequisite:* 330A)

NO(3-0)



**\*H A 333A (formerly part of 333) (1½) EARLY ARTS OF SOUTHEAST ASIA**

A survey of the arts of Southeast Asia, starting with prehistoric and contemporary tribal/indigenous cultures, up to the arrival of Islam. Discussion will include the majority of countries in the region, with emphasis on Indonesia. Monumental and personal arts relating to Hindu, Buddhist and Primal religious communities will be discussed with attention to gender and historiography. Indigenous texts and film will be used as source materials and basis for discussion. (Normally to be offered in alternate years with 330 A, B) NO(3-0)

**\*H A 333B (formerly part of 333) (1½) LATER ARTS OF SOUTHEAST ASIA**

A survey of the arts of Southeast Asia, from the arrival of Islam through the colonial period and up through the twentieth century. Local definitions of art, the role of the artist in society and issues of patronage will be discussed against a background of continuity and change. Indigenous texts and film will be used as source materials and basis for discussion. (Prerequisite: 333A) NO(3-0)

**\*H A 336 (1½) ART AND ARCHITECTURE OF MODERN INDIA**

A study of Indian art and architecture since the arrival of Western powers and Western religions in the early 16th century to the present. The course will examine material relating to Christian missions, the British presence, the revivalist movement, and contemporary art. NO(3-0)

**\*H A 340A (formerly half of 441) (1½) THE 15TH CENTURY IN NORTHERN EUROPE**

A consideration of aspects of 15th century art and architecture in Northern Europe. Issues to be studied may include: the religious, social and political functions of art; patronage systems; materials and methods; function and setting; changes in style and taste. NO(3-0)

**\*H A 340B (formerly half of 441) (1½) RENAISSANCE AND REFORMATION IN NORTHERN EUROPE**

A consideration of aspects of 16th century art and architecture in Northern Europe. Issues to be studied may include: the impact of humanism in the North; artistic response to the Protestant Reformation; print culture; patronage questions; materials and methods; function and setting; changes in style and taste. S(3-0)

**\*H A 341A (1½) THE 15TH CENTURY IN ITALY**

The art and architecture of Italy during the "Early Renaissance" of the 15th century. Works of art and artists' careers will be examined within the context of themes such as: patronage; materials and methods; function and setting; and religious and intellectual climate. (Not open to students with credit for HA 341) NO(3-0)

**\*H A 341B (1½) THE 16TH CENTURY IN ITALY**

The art and architecture of Italy during the 16th century. The works and careers of "High Renaissance" masters such as Leonardo da Vinci, Raphael, Titian and Michelangelo will be studied, along with thematic issues relating to the development and interpretation of Italian art up to ca. 1580. (Not open to students with credit for HA 341) F(3-0)

**\*H A 342A (1½) THE 17TH CENTURY IN ITALY**

A consideration of aspects of 17th century Italian art and architecture, particularly in Rome. The careers and works of individual artists will be related to topics such as: patterns of patronage; religious and political functions of art; changes in style and taste; critical attitudes. (Not open to students with credit in HA 342) NO(3-0)

**\*H A 342B (1½) THE 17TH CENTURY IN NORTHERN EUROPE**

A study of art in France, Flanders, Holland and England in the 17th century. The emphasis will be on social, political and religious factors that influenced the functions and consumption of images, the emergence and roles of distinct genres, the influence of academies and theoretical debate. (Not open to students with credit in HA 342) NO(3-0)

**\*H A 343A (1½) THE 18TH CENTURY IN ITALY**

A study of developments in Italian art and architecture during the 18th century. Particular attention will be paid to Venice as an artistic centre, and the works of individual artists will be considered within contexts such as: the aims and effects of church, state and private patronage; foreign markets and influences; attitudes of art critics and collectors. (Not open to students with credit in HA 343) NO(3-0)

**\*H A 343B (1½) THE 18TH CENTURY IN NORTHERN EUROPE**

A consideration of art and architecture in northern Europe, especially France and Britain, during the 18th century. Emphasis will be placed upon examining works of art within the contexts of political ideologies, social roles, and theoretical debate. (Not open to students with credit in HA 343) NO(3-0)

**\*H A 345 (1½) THE RENAISSANCE TRADITION IN ARCHITECTURE**

A survey of the architecture of western Europe from the early Italian Renaissance architecture of Brunelleschi to 18th century Palladian architecture in England. NO(3-0)

**\*H A 352 (formerly half of 351) (1½) THE GENESIS OF ISLAMIC ART AND ARCHITECTURE**

An examination of the background, origins, and evolution of early Islamic art and architecture from the 7th century rise of Islam to the end of the 9th century. The course will investigate the fundamentals of Islam as a faith, Islam's relationship to the pre-Islamic past and the theoretical problem of creating a new visual culture to serve a new religion and society. NO(3-0)

**\*H A 354 (formerly half of 351) (1½) MEDIEVAL ISLAMIC ART AND ARCHITECTURE**

The high medieval art and architecture of Islam from the 10th century to the Mongol invasions of the mid 13th century. The course will focus on the medieval ideal of Islamic unity and the historic fragmentation of Islam into different, often opposed, regional and cultural entities. Major themes will be the emergence of Turkish peoples as the dominant political rulers of the Near East and the impact of Latin and Byzantine Christendom on Islamic visual culture. NO(3-0)

**\*H A 355 (1½) THE ART AND ARCHITECTURE OF ANCIENT EGYPT**

A thorough survey of the art and architecture of Pharaonic Egypt from 3200 B.C. to the beginning of the Christian era. Through the examination of artifacts, monuments, and texts the course will investigate the influence of social and religious thought upon Egyptian art. NO(3-0)

**\*H A 356 (1½) THE ART AND ARCHITECTURE OF THE ANCIENT NEAR EAST**

A comprehensive survey of artistic and architectural traditions in Mesopotamia, Palestine, Antolia, Iran, and related areas from 3500 B.C. to the beginning of the Muslim era (7th century A.D.). The course will emphasize the role of religious thought and social change in shaping architecture and the arts. NO(3-0)

**\*H A 357 (formerly half of 353) (1½) AMIRATES AND SULTANATES OF THE MUSLIM MEDITERRANEAN**

The art and architecture of Islam in the lands bordering the Mediterranean (Spain, North Africa, Egypt, Palestine, Syria, and Turkey) from the mid 13th to the 20th century. Major areas of emphasis will be the Nasrid dynasty of Spain, the Mamluk dynasty of Egypt, and the Ottoman sultanate of Turkey. Particular attention will be paid to the art of calligraphy and to cross cultural connections between Islam and Western Europe and Byzantium. NO(3-0)

**\*H A 358 (formerly half of 353) (1½) ISLAM AND ASIA**

The art and architecture of the Muslim lands and peoples east of Mesopotamia (Iran, India, Central Asia, and Southeast Asia) from the 13th to the 20th century. Beginning with the Mongol invasions of Iran in the mid 13th century, this course will focus on the classic Islamic culture of Iran and its diffusion into Central Asia and India. The arts of the illustrated manuscripts (particularly Persian and Mughal painting) will be a major emphasis. F(3-0)

**\*H A 359 (1½) ISLAMIC ART AND ARCHITECTURE IN SOUTHEAST ASIA**

A survey of the major architectural and artistic achievements of Islamic civilization in the Far East and Southeast Asia from the 16th century to the present day. Emphasis on the social, religious, and cultural impact of Islam on the arts and the subsequent development of distinctive Islamic traditions in this region. (Not open to students with credit in PACI 359) NO(3-0)



**\*H A 360 (1½) EUROPEAN ART FROM 1780 TO 1848**

An examination of European painting and sculpture from 1780 to 1848. The course begins with the rise of Neoclassicism and the reaction against the Rococo around the time of the French Revolution and continues by tracing the developments in art with the Romantic movement during the early 19th century.

F(3-0)

**\*H A 361 (1½) EUROPEAN ART FROM 1848 TO 1880**

An examination of European painting and sculpture from 1848 to 1880. The course traces the development and influence of art movements such as Realism, Impressionism, and Symbolism, emphasizing the struggle against the domination of the Academy and of academic art in the later 19th century. (*Prerequisite:* 360)

S(3-0)

**\*H A 362 (3) PAINTING AND SCULPTURE FROM 1880 TO 1980**

A thorough study of European painting and sculpture from 1880 to 1980, concluding with a consideration of post 1945 developments in North America. The course begins with Post-Impressionism and traces the development and influence of such movements as Cubism, Expressionism, Constructivism, and Surrealism, as well as the careers of individual artists outside any group or movement. Lectures combine formal and contextual analysis.

NO(3-0)

**\*H A 363 (1½) THE CINEMA AND MODERN ART MOVEMENTS**

An examination of the history of film in relationship to the major art movements of the 20th century. Students will view and analyze films by such directors as Lang, Eisenstein, Bunuel, Brakhage, and Snow; these films will be discussed in the light of their connection to such influential modern art movements as German Expressionism, Russian Constructivism, Surrealism, Abstract Expressionism, and Conceptual Art.

NO(3-0)

**\*H A 364 (1½) DOCUMENTARY FILM**

An intensive study of film as document of time, place and action. Influence of social and artistic context will be considered. Attention will be largely directed to Canadian documentary films, a leader in this genre today. Films studied may include works by Flaherty, Grierson, Lorentz, Riefenstahl, Wiseman, National Film Board.

NO(3-0)

**\*H A 365 (1½) EXPERIMENTAL FILM**

This course looks at film as art. It investigates a wide variety of experimental forms and covers a range of historical periods and contexts. Emphasis will be placed on analyses of key films and on theories of film developed by both artists and critics. Particular attention will be paid to the Canadian experimental tradition. (Preference to third and fourth year students)

NO(2-1)

**\*H A 366 (1½) INTRODUCTION TO HISTORY IN CINEMA**

A general introduction to film as an art form of world importance. Film will be considered historically as a product of time and place as well as a medium influencing many aspects of our lives. There will be consideration of genres, of directors' styles, of technical aspects, and of the relationship of film to other media. (Preference given to third and fourth year students)

NO(3-0)

**\*H A 367 (1½) HISTORY IN CINEMA**

This course examines the cinema as a product of time and place. Emphasis will be placed on the relationship between particular film movements and genres and their historical contexts and on theories about the role and function of film in society. (Preference to third and fourth year students)

NO(2-1)

**\*H A 368A (1½) (formerly half of 368) HISTORY OF EARLY CANADIAN ART**

A history of the visual arts, especially painting and sculpture from 1759 to the early 20th century. The course will begin with a brief consideration of the background in 17th and early 18th art, especially of Quebec, and end with the rise of the Group of Seven and their contemporaries.

F(3-0)

**\*H A 368B (1½) (formerly half of 368) HISTORY OF TWENTIETH CENTURY CANADIAN ART**

A history of the visual arts, especially painting and sculpture, from the end of World War One to the 1970s. The course will begin with the mature work of the Group of Seven and their contemporaries and end

with a treatment of the "post-modernist" reactions to international modernism in the late Sixties and Seventies. (368A is helpful preparation for this course but not a prerequisite)

S(3-0)

**\*H A 369 (1½) HISTORY OF PHOTOGRAPHY**

An introductory survey of the history of photography from its invention in 1839 until the present. Topics to be addressed include the changing role of the photographer as scientist and artist, the relationship between photography and other visual arts, 19th century travel photography, women photographers, and the various photographic processes which have been developed in the 150 year history of the medium.

S(3-0)

**\*H A 371 (1½) EARLY CHINESE ART**

An introductory survey of Chinese art from the Neolithic period through the Tang dynasty. Topics include the ritual vessels of the Bronze age, the impact of the Indian religion of Buddhism on Chinese arts, the rise of landscape painting, and the classic era of figure painting. Chinese histories and theories of the arts will be read in translation. (Not open to students with credit in PACI 371)

F(3-0)

**\*H A 372 (1½) LATER CHINESE ART**

An introductory survey of Chinese art from the Five Dynasties era to the present. The emphasis will be on the various genres and styles of painting, and on the role of the educated elite as painters, patrons, critics and theorists. (Students should have completed HA 371 or the equivalent) (Not open to students with credit in PACI 372)

S(3-0)

**\*H A 373 (1½) EARLY JAPANESE ART**

An introductory survey of Japanese art which traces the history of Japan's absorption and transformation of continental (Chinese and Korean) influences from prehistoric times through the Kamakura period. The emphasis is on Buddhist arts and the rise of the long narrative handscrolls known as *emakimono* during the Heian and Kamakura periods. (Not open to students with credit in PACI 373)

NO(3-0)

**\*H A 374 (1½) LATER JAPANESE ART**

An introductory survey of Japanese art from the Muromachi through the Edo periods. The emphasis is on the impact of Zen Buddhism on several art forms; the new castles with their paintings on sliding doors and folding screens; and the various schools of painting and printmaking active during the Edo period, an era during which revivals of native styles flourished along side experiments inspired by Chinese and Western art. (Students should have completed 373 or the equivalent) (Not open to students with credit in PACI 374)

NO(3-0)

**\*H A 375A (1½) (formerly half of 375) PRE-COLUMBIAN ART**

The art of central and southern Mexico and northern Central America before 1492. This culture area called Mesoamerica was characterized by high civilization. (*Prerequisite:* None)

F(3-0)

**\*H A 375B (1½) (formerly half of 375) PRE-COLUMBIAN ART**

The art of South America before 1492 in the Andean area characterized by high civilization. (*Prerequisite:* None)

S(3-0)

**\*H A 382A (formerly part of 382) (1½) NATIVE NORTH AMERICAN ARTS**

An introduction to Native North American arts of the peoples of the Northwest Coast and the Arctic. The course examines artistic expression from the earliest known art works to the present. It explores style and diversity; cultural contexts; the relationship between artistic expression and environment; spirituality, and responses of artists to contact with non-native peoples. (*Prerequisite:* None)

NO(3-0)

**\*H A 382B (formerly part of 382) (1½) NATIVE NORTH AMERICAN ARTS**

An introduction to Native North American arts of the peoples of the Southwest, California, Great Basin and Southeast. The course examines artistic expression from earliest known cultural contexts; the relationship between artistic expression and environment; spirituality; and responses of artists to contact with non-native peoples. (*Prerequisite:* None)

NO(3-0)



**\*H A 382C (formerly part of 382) (1½) NATIVE NORTH AMERICAN ARTS**

An introduction to Native North American arts of the peoples of the Subarctic, Plains, Plateau and Woodlands. The course examines artistic expression from earliest known art works to the present. It explores style and diversity; cultural contexts; the relationship between artistic expression and environment; spirituality; and responses of artists to contact with non-native peoples. (*Prerequisite:* None) S(3-0)

**\*H A 384 (1½) ARTS OF THE NORTHWEST COAST**

An advanced level study of the native arts of the Northwest Coast from prehistoric times to the present. Emphasis will be placed on stylistic analysis, historical and cultural contexts, and changes and continuities in artistic expression in the 19th and 20th centuries. (*Prerequisite:* HA 382A or permission of the Department) NO(3-0)

**\*H A 387A (1½) (formerly 387) EUROPEAN AND NORTH AMERICAN ARCHITECTURE, 1750 TO 1900**

A survey of key figures and movements in Western architecture from the beginnings of Neoclassicism to the appearance of radically novel forms of design in Europe before World War I. HA 223 would be helpful preparation for this course. NO(3-0)

**\*H A 387B (1½) (formerly 387) TWENTIETH-CENTURY ARCHITECTURE IN EUROPE AND NORTH AMERICA**

A survey of key figures and movements in Western architecture between 1900 and today. The work of "modern masters" such as Wright, Le Corbusier, and Mies van der Rohe will be considered, along with that of more traditional architects culminating in the appearance of "post-modernism" in the 1970s. NO(3-0)

**\*H A 410 (1½) STUDIES IN THE HISTORY OF WESTERN ART HISTORY**

A consideration of selected art-historical texts, from the Renaissance to the present, with a view to understanding the changing factors that have shaped the aims and methods of western art history. For students interested in the history of art history, this course complements HA 472. NO(3-0)

**\*H A 412 (1½) GENDER ISSUES IN ART HISTORY AND ART CRITICISM**

A consideration of selected art-historical texts which examine gender-related social, political or cultural issues in works of art and/or architecture by either men or women. For students interested in the history of art history, this course complements HA 410 or HA 472. NO(3-0)

**\*H A 420 (1½, formerly 3) SPECIAL STUDIES IN MEDIEVAL ART**

A different aspect or period of medieval art will be selected for study each year. Emphasis will be placed on a detailed study of a limited number of works rather than a general survey. (May be taken more than once, depending on circumstances) F01: "Illuminations and Stained Glass" F(3-0)

**\*H A 430 (1½) SPECIAL STUDIES IN THE ARTS OF SOUTH AND SOUTHEAST ASIA**

An intensive study of a selected aspect or area of the arts of South and Southeast Asia (The course may be taken for credit more than once, in different topics.) S01: "Indigenous Arts of Southeast Asia" S(3-0)

**\*H A 431 (1½) MODERN ART IN INDONESIA**

An introduction to the 20th century development of modern art in Indonesia, in the contexts of colonialism, nationalism, revolution and independence. Changes in Indonesian definitions of 'art' and 'artist' will be examined in the work of three generations of artists, against the background of classical and indigenous arts. (*Prerequisite:* HA 330 or HA 333, or permission of the instructor) NO(3-0)

**\*H A 432 (1½) IMAGES OF AND BY WOMEN IN SOUTH ASIAN ART**

An examination of two interrelated spheres of artistic images as they relate to ideas about women, self, creativity, society and the cosmos. From select areas of South Asia, depictions of women in classical, elite, folk and modern art, dominated by male artists, will be examined and compared to artistic images created by women. Literature, performance and film will be used as supplementary material. (*Prerequisite:* HA 330 or HA 333, or permission of the instructor) NO(3-0)

**\*H A 433 (1½) IMAGES OF AND BY WOMEN IN SOUTHEAST ASIAN ART**

An examination of two interrelated spheres of artistic images as they relate to ideas about women and their place in the universe. Depictions of women in classical, elite, folk and modern art throughout Southeast Asia will be examined and compared to images of femaleness and self found in the arts created by women. The course will thus highlight local ideas about symbolism, style, gender and hierarchy. (*Prerequisite:* 330, 333 or equivalent) (Not open to students with credit in PACI 432) NO(3-0)

**\*H A 442 (1½) THE HIGH RENAISSANCE IN ITALY**

An intensive study of the art and architecture of Italy between 1480 and 1520. Emphasis will be placed on the careers of Leonardo da Vinci, Raphael and Michelangelo, and on the role of papal patronage in Rome. Students should have completed HA 341. NO(3-0)

**\*H A 443 (1½) THE LATE RENAISSANCE IN ITALY**

An intensive study of the art and architecture of Italy between 1520 and 1580. Topics will include the role of prints and drawings, definitions of Mannerism, and contemporary theories of art and art history. Intended as a sequel to HA 442. Students should have completed HA 341 or 442. NO(3-0)

**\*H A 444 (1½) VENETIAN PAINTING**

A survey of painting in the Republic of Venice from the 14th to the 18th century, with an emphasis on the uniqueness of the Venetian tradition and its relationship to other centres of artistic production. Topics will include the careers of individual artists, the role of workshops, and the demands of function, setting, and patronage. Students should have completed HA 341 or 342. NO(3-0)

**\*H A 445 (1½) SPECIAL STUDIES IN RENAISSANCE ART**

An intensive study of a selected aspect of Renaissance art. Enrollment will be limited to permit a seminar format. May be taken for credit more than once, on different topics. (*Prerequisite:* permission of the instructor) NO(3-0)

**\*H A 447 (1½) SPECIAL STUDIES IN BAROQUE AND 18TH CENTURY ART**

An intensive study of a selected aspect of Baroque or 18th century art. Enrollment will be limited to permit a seminar format. May be taken for credit more than once, on different topics. (*Prerequisite:* permission of the instructor) S01: "Rembrandt" S(3-0)

**\*H A 450 (1½ or 3) TOPICS IN ISLAMIC ART AND CIVILIZATION**

This course will involve intensive study of some special aspect or area of Islamic civilization. Content may vary each year. (May be taken for credit more than once depending on circumstances) (*Prerequisite:* Permission of the instructor) S01: "Turkish Art and Architecture" S(3-0)

**\*H A 451 (1½) ISLAMIC ARCHITECTURE**

An examination of the architectural traditions of Muslim peoples from Spain to South Asia with emphasis on the historical development of Islam's architectural idiom, the geographic dispersion of its forms, the relationship of architecture to its urban context, and the role of architectural patrons. NO(3-0)

**\*H A 455 (1½) PERSIAN PAINTING**

A study of the history and development of painting in Iran from the 13th to the 19th centuries. The course will examine the major masters, patrons, and style of Persian miniature painting and will trace the influence of Persian painting on the arts of Mughal India and Ottoman Turkey. NO(3-0)

**\*H A 460 (1½ or 3) SPECIAL STUDIES IN 20TH CENTURY ART**

Intensive study of modern movements (e.g., Cubism, Surrealism, Expressionism) or specific problems (art and politics, critical theory) in 20th century art. Combination of topics will vary. NO(3-0)



**\*H A 462 (HIST 462) (1½) ART AND REVOLUTION**

Examines the role of the artist (mainly through painting and graphics) in the major social and political revolution of modern times. Major emphasis on the French, Russian, and Chinese revolutions but some consideration of political art in other revolutions and movements of social protest. NO(3-0)

**\*H A 463 (1½ or 3) TOPICS AND ISSUES IN POLITICAL ART**

Studies in political art, that is, art which directly refers to social and political issues, rather than the question of the social background and function of art in general. Although the specific periods and topics covered vary, each seminar examines issues of the artists' social conscience and aesthetic effect, state control and manipulation of the arts, art as instrument for and expression of social change. NO(3-0)

**\*H A 464 (3) CONTEMPORARY ART**

An intensive study of major art movements in Europe and North America since World War II. Course includes an examination of recent painting and sculpture, as well as considering less conventional art forms, such as installations, earthworks, and performance art. (*Prerequisite*: 260 or 362) Y(3-0)

**\*H A 465 (1½) SPECIAL STUDIES IN 19TH AND/OR 20TH CENTURY ARCHITECTURE**

An intensive study of a selected aspect of modern architecture (for example, the development of a particular building-type, the work of a certain architect or group of architects, the emergence of a certain theme or issue in architecture). Topics will vary. (This course may be taken more than once with the department's permission, depending on the course contents) (*Prerequisite*: either 387A or 387B) NO(3-0)

**\*H A 467 (3) REPRESENTING DIFFERENCES: SELVES AND OTHERS IN FILM**

An examination of perspectives on different cultures, nations, classes and genders in a variety of forms such as narrative, documentary, and experimental film. Films by members of the group represented and by those foreign to the group represented will be studied. This is a team-taught course emphasizing films about and from various regions of the world. (*Prerequisite*: 295 or a 300 level course in one of the individual cultural areas covered.) NO(3-0)

**\*H A 468 (1½) SPECIAL STUDIES IN CANADIAN ART**

An intensive study of a selected aspect of Canadian art or architecture. Topics will vary. May be taken for credit more than once, on different topics. (*Prerequisite*: Permission of the instructor) F01: "Canadian Architecture: 1850 to the Present" F(3-0)

**\*H A 470 (1½) SPECIAL STUDIES IN EAST ASIAN ART**

Intensive studies of special aspects of Chinese and/or Japanese art. Course content will vary. (This course may be taken for credit more than once in different topics with permission of the Department) F01: "20th Century Chinese Art and Cultural Identity" F(3-0)

**\*H A 471 (1½) STUDIES IN THE HISTORY OF CHINESE PAINTING**

An intensive study of a selected aspect of Chinese painting, focusing on the art of one or two dynasties, or examining a longer period of time in order to examine a theme such as patronage or landscape representation. Course content will vary. NO(3-0)

**\*H A 472 (1½) STUDIES IN THE HISTORY OF CHINESE ART HISTORY**

This course will study the history of Chinese histories of painting, art criticism, and aspects of theories of the arts, with an emphasis on the fifth through the twelfth centuries. Texts available in translation will be studied in relation to each other, to surviving paintings, and to writing about other art forms. For students interested in the history of art history, this course complements HA 410. NO(3-0)

**\*H A 473 (1½) SPECIAL STUDIES IN JAPANESE PAINTING**

An intensive study of a selected aspect of Japanese painting, focusing on the art of a specific period or examining a longer period of time in order to study themes such as revivals of indigenous traditions or different adaptations of Chinese influences. Course content will vary. NO(3-0)

**\*H A 474 (1½) POPULAR CULTURE IN PRE-MODERN JAPAN**

A study of popular culture in Edo-period Japan focusing on Ukiyo-e, a school of print designers and painters that strongly influenced Modern European art. Catering to the urban masses, this school helped promote the kabuki actors and elite courtesans. (Class limited to fifteen students) NO

**H A 478 (1½) POPULAR CULTURE: THEORY AND CRITICISM**

A study of popular culture and the critical theories which have emerged to explain the relationships among commercial forms (such as mainstream film and television), the socio-historical context, and audiences. S01: "Popular Culture: Theory & Criticism" S(3-0)

**\*H A 480 (1½ or 3) TOPICS IN 20TH CENTURY NATIVE NORTH AMERICAN ARTS**

An intensive study of selected aspects of 20th century Native North American arts. Artists, regions and styles discussed will vary. (May be taken for credit more than once, on different topics) (*Prerequisite*: at least one of the following: 382A/B/C, 384 or permission of the instructor) NO(3-0)

**\*H A 482 (1½ or 3) SPECIAL STUDIES IN INDIGENOUS ARTS**

An intensive study of a selected aspect of Native North American, Pre-Columbian, African or Oceanic arts, or a comparative examination of a theme pertinent to indigenous arts from more than one culture area. (May be taken for credit more than once, on different topics) (*Prerequisite*: at least one of the following: HA 382A/B/C, 384, 480, or HA 375A/B, depending on topic) NO(3-0)

**H A 486 (3) INTRODUCTION TO MUSEUM STUDIES**

Collection, organization, maintenance and presentation of museum materials. History and purpose of collections, principles of collections management and research, preservation, care and handling of collections, public presentation of exhibitions, museum organization and management. Topic emphasis at the discretion of the instructor; may involve fieldwork. Depending on instructor and areas covered, and with departmental permission, this course may be taken more than once. (*Prerequisites*: None) (For students taking this course in a distance education format, grading may be INP, final grade.) Y(3-0)

**H A 487 (3) INTRODUCTION TO HERITAGE CONSERVATION**

Care, preservation and maintenance of historic sites and buildings; the conservation of architecture within a museum and urban context; programs and practices in Canada and other countries; procedures for site examination and evaluation; materials pathology; site planning, development and management. Case studies and field work may be required. Topic emphasis at the discretion of the instructor. Depending on the instructor and areas covered, and with departmental permission, this course may be taken more than once. (*Prerequisites*: None) (For students taking this course in a distance education format, grading may be INP, final grade.) Y(3-0)

Further information on all courses in the H A 488 and 489 series may be obtained from the office of the Program of Advanced Studies in Cultural Resource Management, Division of Continuing Studies (721-8462).

**H A 488 (1½) SPECIAL STUDIES IN MUSEOLOGY**

This course may be taken more than once, in different fields, at the discretion of the Department. NO(3-0)

**H A 488A (1½) MANAGING CULTURAL ORGANIZATIONS**

An intensive study of the application of management theory and practice in cultural organizations, with particular emphasis on: characteristics of nonprofit cultural organizations; governance and leadership; establishing mission goals and objectives; roles of executive and artistic directors; policy development and implementation; personnel management and team building; financial management; strategic and operational planning; information management; public relations; marketing; volunteer development; and ethical and legal issues. F(3-0)



**H A 488B (1½) COLLECTIONS MANAGEMENT**

Topics include: collections policies; terminology; classification and cataloguing; accessioning and deaccessioning; loans; gifts; importing and exporting. The course may be offered with an emphasis in computers and the management of collections. F(3-0)

**H A 488C (1½) COMMUNICATING THROUGH EXHIBITIONS**

An examination of the roles of the exhibition in the museum context and the importance of team work and consultation in exhibition development. Topics include the history, functions and purpose of exhibitions; the role of the artifact; frames of reference for communication; the development of storylines; methodologies for planning; the roles of the curator, educator, registrar, conservator, and other staff; project management; funding and sponsorship; temporary and travelling exhibitions; ethical considerations; and evaluation techniques. NO

**H A 488D (1½) CURATORIAL CARE OF ARTIFACTS**

Studies in the conservation of artifacts in metal, ceramics, wood, bone, leather, and other materials. Special emphasis is given to the analysis of environmental factors and the nature of materials. The course includes demonstrations in handling, storage, and packing techniques. Assignments normally will include the preparation of condition reports. NO(3-0)

**H A 488E (1½) CURATORIAL CARE OF PAPER**

Studies in the conservation of paper artifacts, particularly archival materials and works of art on paper. Topics include: the monitoring and control of environmental conditions; storage; handling; treatments. Projects involving practices in the conservation of paper will be assigned. NO(3-0)

**H A 488F (1½) CURATORIAL CARE OF PAINTINGS**

Studies in the conservation of paintings on panel, canvas, and other surfaces. Topics include: documentation of condition; nature of materials and historical uses of media; remedial conservation; curatorial care and maintenance of collections; connoisseurship. NO(3-0)

**H A 488G (1½) PUBLIC PROGRAMMING IN THE HERITAGE COMMUNITY**

The course examines the fundamental role of education, interpretation and public programming in museums, galleries, heritage sites and related agencies, and emphasizes the importance of approaches which respond to community interests and reflect curatorial priorities. Planning, delivery, management and evaluation strategies for a range of programming approaches will be discussed. NO(3-0)

**H A 488H (1½) TOPICS IN MUSEUM STUDIES**

This course will involve intensive study of some special aspect or area of museum studies. Content may vary each year. (May be taken for credit more than once depending on circumstances) S(3-0)

**H A 488J (1½) CURATORSHIP**

This course examines the philosophy of collecting and the application of disciplinary research in the museum context. Topics include collections and acquisition policies, object oriented research methods, documentation analysis, information management and the communication of research through exhibitions, films and print publications. *Depending on instructor and areas covered, and with departmental permission, this course may be taken more than once.* NO(3-0)

**H A 488K (1½) EXHIBITION DESIGN AND INSTALLATION**

An examination of the exhibition design process with a special focus on the design and museological elements which are considered in the creation of effective exhibitions. Topics include the roles of exhibitions; communicating with the visitor; roles of the object; conservation considerations; visitor flow; lighting; colour; storylines; project planning and management; temporary and travelling exhibits; showcase arrangements; production scheduling, installation, and maintenance. Field work, study visits, and the development of a scale model are featured. F

**H A 488L (1½) CULTURAL MANAGEMENT IN CONTEXT**

An intensive study of the current state of the arts and culture in Canada and the social, political and financial context in which cultural organizations are managed. Topics include the role of arts and culture in

Canada; social, political and institutional frameworks; cultural policy and legislation; economic context and impact; funding, governance and leadership; organizational structures and management models; legal and ethical issues; and multicultural and First Nations issues. NO(3-0)

**H A 488M (1½) TOPICS IN CULTURAL MANAGEMENT**

This course will involve intensive study in some special aspect or area of cultural management. Content may vary each year. (May be taken for credit more than once, depending upon circumstances) S(3-0)

**H A 489 (1½) SPECIAL STUDIES IN ARCHITECTURAL CONSERVATION**

This course may be taken more than once, in different fields, at the discretion of the Department. NO(3-0)

**H A 489A (1½) HERITAGE AREA CONSERVATION**

Topics in the conservation and rehabilitation of historic urban and rural areas. The historical, aesthetic, economic, social, and legal aspects of heritage area planning will be considered. Case histories and planning models will be discussed. An applied studies project normally will be assigned. NO(3-0)

**H A 489B (1½) SURVEY METHODS IN BUILDING CONSERVATION**

An intensive examination of methods employed in surveying and recording historic architecture. Topics include: documentation; measured drawings; regular and rectified photography; scale models. NO(3-0)

**H A 489C (1½) INVENTORY AND EVALUATION OF HERITAGE RESOURCES**

Inventory and evaluation of architectural and landscape resources is essential in conservation planning. This course examines methodologies for evaluated inventories of historic buildings, districts and landscapes. Topics include planning the inventory, research methods, identification of styles, field survey techniques, principles of evaluation, development of evaluation criteria, scoring systems, computer applications, and the relationship of inventory and evaluation to the resource management process. Field work and practical assignments are provided; no prior computer experience is required. NO(3-0)

**H A 489D (1½) STUDIES IN BUILDING CONSERVATION**

Theoretical and applied studies in the conservation of historic architecture. Course topics include site history, pathology, preservation and repair of materials (wood, masonry, brick, plasterwork, metalwork), chromochronology. Laboratory sessions on the examination and analysis of materials will be conducted. S(3-0)

**H A 489E (1½) TOPICS IN ARCHITECTURAL CONSERVATION**

This course will involve intensive study of some special aspect or area of architectural conservation. Content may vary each year. (May be taken for credit more than once depending on circumstances) F(3-0)

**H A 489F (1½) THE FABRIC OF HERITAGE BUILDINGS**

To preserve heritage buildings, it is necessary to understand the construction techniques and materials which give them their special character. This course examines building styles and structural elements encountered in historic wood and masonry buildings, and the research, investigation and recording techniques used to plan, organize and document the conservation process. Approaches to preservation and adaption, upgrading to contemporary building and seismic standards, and maintenance planning are covered. Case studies and field work are featured. NO

**H A 489G (1½) HERITAGE LANDSCAPE AND GARDENS**

Principles and practices essential to the conservation and restoration of heritage landscapes and gardens are covered. Topics include: defining 'heritage' landscapes; history and philosophy of preservation; approaches to preserving landscapes; preservation legislation, planning, easements, registration and funding; research techniques; site examination; landscape inventory and analysis; evaluation of extant plant materials; landscape archaeology; plant introduction; development of plant nomenclature and historic species identification; and documentation and acquisition of historic plant materials. Field work is featured. NO



**H A 489H (1½) CULTURAL TOURISM**

The advantages that cultural tourism developments have to offer, along with the dangers involved in such ventures will be explored through this course. It will introduce the concept of modern tourism, its development, marketing, and community impacts and relate these features to the preservation of a community's heritage and culture. The course will consist of lectures, guest speakers, field trips and video presentations.

NO

**\*H A 490 (1½ or 3) DIRECTED STUDIES**

A course of directed readings and written assignments taken under the supervision of a faculty member. Approval must be granted by the Chair of the Department. May be taken more than once in different areas, up to a total of 3 units. Normally available to History in Art major, honours and diploma program students only.

NO

**H A 491 (3) INTERNSHIP**

Available to students in the Diploma Program in Cultural Conservation only.

NO(Grading: INP, COM, N or F)

**\*H A 492 (1½ or 3) ADVANCED STUDIES IN HISTORY IN ART**

An opportunity for highly qualified undergraduate students to take a graduate seminar in the Department for undergraduate credit. Approval must be granted by the Chair of the Department. May be taken more than once in different areas, up to a total of 3 units. Normally available to History in Art major, honours, and diploma program students only.

NO

**H A 499 (3) HONOURS SEMINAR**

This course is intended to instruct fourth year honours students in problems and methodology of advanced research.

Y(3-0)

\* Approved for elective credit in the Faculty of Arts and Science.

## SCHOOL OF MUSIC

Michael M. Longton, B.M., M.M. (Brit. Col.), Associate Professor and Director of the School (theory, composition)

Alexandra Browning-Moore, B.Mus. (Brit. Col.), Professor (voice)

John A. Celona, B.M., M.A. (San Fran. St.), Ph.D. (Calif., San Diego), Professor (composition)

William Kinderman, B.A. (Dickinson Coll.), Ph.D. (Calif., Berk.), Professor (music history, musicology)

Gordana Lazarevich, Artist and Licentiate Dip. (Tor.), B.Sc., M.Sc., (Juilliard), Ph.D. (Col.), Professor (music history, musicology)

Ian McDougall, B.Mus., M.Mus. (Brit. Col.), Professor (trombone, Big Band)

Bruce E. More, B.Mus. (Brit. Col.), M.Mus., M.M.A., D.M.A. (Yale), Professor (theory, conducting)

Louis D. Ranger, B.Mus. (Juilliard), Professor (trumpet)

Erich P. Schwandt, B.A., M.A., Ph.D. (Stan.), Professor (music history, musicology, harpsichord, organ)

Richard Ely, B.M. (Mon.), M.M. (Ill.), Associate Professor (French horn)

Patricia Kostek, B.Sc. (Mansfield St. Coll.), M.Mus. (Mich. St.), Associate Professor (clarinet)

Harald M. Krebs, B.Mus. (Brit. Col.), M.Phil., Ph.D. (Yale), Associate Professor (theory)

Alexandra Pohran-Dawkins, B.Mus. (Tor.), Associate Professor (oboe, chamber music)

Lanny R. Pollet, B.Mus. (Eastman), M.Mus. (U. of Vic.), Associate Professor (flute, chamber music, orchestration)

W. Andrew Schloss, B.A. (Bennington Coll.), Ph.D. (Stan.), Associate Professor (electronic and computer music)

Bruce Vogt, A.R.C.T. (Tor.), B.Mus. (W. Ont.), M.Mus. (Tor.), Associate Professor (piano)

Christopher Butterfield, B.Mus. (U. of Vic.), M.A. (S.U.N.Y., Stony Brook), Assistant Professor (composition, theory)

Arthur Rowe, B.Mus. (W. Ont.), M.Mus. (Indiana), Assistant Professor (piano)

Joan Backus, B.Mus., M.A., Ph.D. (U. of Vic.), Senior Instructor (history, theory)

M. Elaine Daniels, Administrative Officer

**Artists-in-Residence:**

Robin Wood, LL.D. (U. of Vic.), F.R.A.M. (piano) (1994-96)

Lafayette String Quartet:

Ann Elliott-Goldschmid, B.M. (Boston) (violin, chamber music)

Pamela R. Highbaugh Aloni, B.M. (Calif. St.), M.M. (Indiana) (cello, chamber music)

Joanna E. Hood, B.M. (San Fran. Cons. Mus.), M.M. (Indiana) (viola, chamber music)

Sharon M. Stanis, B.M., M.M. (Indiana) (violin, chamber music)

**Visiting, Adjunct and Cross-Listed Appointments:**

Phillip T. Young, B.A. (Bowdoin), M.Mus. (Yale), Adjunct Professor (1994-96) (music appreciation, organology)

Gerald N. King, B.Mus. (Brit. Col.), M.Mus. (W. Wash.), Ed.D. (B.Y.U.), Associate Professor (Arts in Education) (1994-96) (conducting)

Sandra L. Acker, B.A. (Mich.), M.A. (Wash. St.), B.L.S. (Alta.), Adjunct Assistant Professor (1994-96) (bibliography)

Susan Young, B.A. (B.Y.U.), M.Mus. (Calg.) Visiting Assistant Professor (1994-95) (voice)

Salvador Ferreras, B.Mus. (Windsor), Visiting Lecturer (1994-95) (percussion, ethnomusicology)

**Part-time Lecturers 1994-95 Session:**

Anthony Booker, B.Mus., M.Mus. (U. of Vic.) (piano accompanist)

Eugene Dowling, B.M. (Mich. St.), M.M. (Northw.) (tuba, euphonium, trombone)

Judith Dowling, B.Mus., M.Mus. (U. of Vic.) (voice)

Alexander Dunn, B.Mus., M.Mus. (San Fran. Cons. Mus.), Ph.D. (Calif., San Diego) (guitar)

Catherine Garneau (double bass)

Lynne Greenwood, B.Mus. (Indiana), M.Mus. (Northw.) (saxophone)

Bradford Howland, B.Mus. (Brit. Col.), M.M. (Northw.) (trombone)

Sylvia Imeson, B.Mus. (Mon.), M.A., Ph.D. (U. of Vic.) (music history and theory)

Eva Kinderman, Perf. Dipl. (Vienna) (piano)

Taka Kling, M.M. (Tokyo), Artist's Dip. (Vienna) (harp)

May-Ling Kwok, B.Mus. (U. of Vic.), M.M. (Indiana) (piano)

Vincent Schillacci-Ventura, B.Mus. (Mt. All.), M.Mus. (U. of Vic.) (electronic and computer music)

Nancy Van Oort, B.Mus.Ed. (W. Ont.) (bassoon)

## GRADUATE PROGRAMS

For information on studies leading to the M.A., M.Mus. and Ph.D. degrees, see page 349.

## UNDERGRADUATE PROGRAMS

For students who wish to prepare themselves for careers in music, graduate study, etc., the School of Music offers majors in Composition and Theory, Music Education, Music History and Literature, Comprehensive (formerly General) Program, and Performance, leading to the degree of Bachelor of Music.

## ADMISSION REQUIREMENTS

Enrollment in the Bachelor of Music program is limited at the present time to approximately 180 students.

**1. Applicants from Secondary School**

Students must apply to Admission Services for acceptance to the University and in addition must make separate application to the School of Music for acceptance to the program. The School requires that all prospective students demonstrate ability in an accepted performance area (instrument or voice). For this purpose a personal audition is recommended; if an audition is not possible a high quality tape recording may be submitted instead. All applicants must submit two letters of recommendation from qualified musicians. Auditions are held each year beginning in late March. Students are urged to apply as early as possible



since places cannot be guaranteed for qualified applicants once positions are filled.

Audition appointments and further information may be obtained from:

School of Music  
University of Victoria  
P.O. Box 1700, Victoria, B.C. V8W 2Y2  
(604) 721-7902, FAX (604) 721-6597

## 2. Applicants from Other Universities and Colleges

The procedure is the same as that described in the preceding paragraph. The Director of Admissions will consult the School for advice on transfer credit for music courses that have been completed elsewhere. This credit and School admission procedures will determine into which year of studies the student will be accepted. No students are admitted into the final, fourth year.

## PROGRAM OF COURSES

All B.Mus. students, regardless of their eventual choice of major, are required to take a common first year program.

| Year 1              |    |
|---------------------|----|
| 101A                | 1  |
| 101B                | 1  |
| 110                 | 3  |
| 140                 | 2  |
| 170                 | 1  |
| 180*                | 1  |
| 181*                | 1  |
| English 100 level** | 3  |
| Nonmusic elective   | 3  |
|                     | 16 |

\*Not required for students whose principal performance area is voice.

\*\*Students entering a Music Education Major require a minimum of B- in ENGL 115 or an average of B- in ENGL 121/122.

In addition to the courses listed above, students intending to major in Composition must enroll in 105, and students wishing to major in Music Education must register in ME 101 (Secondary) or ME 206 (Elementary). These courses may function as music electives or non-music electives in all B.Mus. programs.

All B.Mus. students are required to demonstrate proficiency at the keyboard. Students who fail to satisfy this requirement by the end of the first year may be required to complete 236.

At the end of the common first year, each student will declare a choice of major and will be assigned a faculty adviser who will assist in selecting appropriate elective courses, ensure that program requirements are satisfied and oversee year to year progress. Acceptance into the major program of the student's choice and continuance in that major must be approved by the appropriate division of the School. A student whose progress is judged to be unsatisfactory may be refused permission to continue in the chosen original major. A student who fails to achieve a grade of C+ or better in individual tuition (MUS 140-440) will have his/her status reevaluated by a committee consisting of the student's teacher, adviser, the head of the performance section, and the Director of the School. In some cases the committee may determine that the student should be required to withdraw from the B.Mus. program.

Students who intend to declare Music Education as their major must be formally interviewed at the end of the first year. Those who are admitted and complete this program will automatically be admissible to the Post Degree Professional Program in their assigned year. Due to quotas, students who do not enter professional year in the assigned year will have to compete for available spaces. In addition, the cases of students who do not maintain a 5.0 grade point average in upper level music and music education courses and 4.0 overall will be reviewed. Such students will be given a trial period to reach the specified GPA, and, if unsuccessful, be required to withdraw from the program.

Exceptions to the following program requirements can be made only in special cases and with the written approval of the Director.

## Major in Composition and Theory

| Year 2            |    | Year 3            |    | Year 4             |    |
|-------------------|----|-------------------|----|--------------------|----|
| 201               | 2  | 301               | 3  | Two of: 401A, 401B |    |
| 205               | 3  | 305               | 3  | 401C, 401D         | 3  |
| 240               | 2  | 306               | 1½ | 405                | 3  |
| 270               | 1  | 307               | 1½ | 440                | 2  |
| 350               | 3  | 340               | 2  | Music elective     | 3  |
| Nonmusic elective | 3  | Nonmusic elective | 3  | Nonmusic elective  | 3  |
|                   | 14 |                   | 14 |                    | 14 |

See Ensemble Requirements below.

## Major in Music History and Literature

| Year 2                      |    | Year 3                 |    | Year 4                 |    |
|-----------------------------|----|------------------------|----|------------------------|----|
| Music history elective      | 3  | Music history elective | 3  | Music history elective | 3  |
| 201                         | 2  | 301                    | 3  | Two of: 401A, 401B     |    |
| 240                         | 2  | 340                    | 2  | 401C, 401D             | 3  |
| 270                         | 1  | Music elective         | 3  | 440                    | 2  |
| Music or non-music elective | 3  | Nonmusic elective      | 3  | 499                    | 3  |
| Nonmusic elective           | 3  |                        |    | Nonmusic elective      | 3  |
|                             | 14 |                        | 14 |                        | 14 |

See Ensemble Requirements below.

## Major in Comprehensive Program

| Year 2              |    | Year 3              |    | Year 4                              |    |
|---------------------|----|---------------------|----|-------------------------------------|----|
| 201                 | 2  | 301                 | 3  | Two of: 401A, 401B                  |    |
| 240                 | 2  | 340                 | 2  | 401C, 401D                          | 3  |
| 270                 | 1  | *Music electives    | 6  | 440                                 | 2  |
| *Music electives    | 6  | **Nonmusic elective | 3  | *Music elective                     | 3  |
| **Nonmusic elective | 3  |                     |    | **Nonmusic elective                 | 3  |
|                     | 14 |                     | 14 | Nonmusic elective or music elective | 3  |
|                     |    |                     |    |                                     | 14 |

See Ensemble Requirements below.

\* Music electives must include:

- (a) at least 3 units of music history above the 110 level
- (b) either 350 or 356.

\*\* Nonmusic electives will normally include:

- (a) 6 units of language courses, preferably German, Italian, or French
- (b) 3 units of art history, theatre history, or classics
- (c) 3 units of philosophy, mathematics or a science.

## Major in Performance

| Year 2                      |    | *Year 3                |    | *Year 4            |    |
|-----------------------------|----|------------------------|----|--------------------|----|
| 201                         | 2  | 301                    | 3  | Two of: 401A, 401B |    |
| 245                         | 6  | 345                    | 6  | 401C, 401D         | 3  |
| 270                         | 1  | Music history elective | 3  | 445                | 6  |
| Music or non-music elective | 3  | Nonmusic elective      | 3  | 448                | 1  |
| Nonmusic elective           | 3  |                        |    | Nonmusic elective  | 3  |
|                             | 15 |                        | 15 |                    | 13 |

See Ensemble Requirements below.

\* Piano majors are required to take 328A and 328B, and are advised to take 360 and 361 in addition to the courses listed.

## Major in Music Education — Secondary (Instrumental)

| Year 2                          |     | Year 3                     |    |  |     |
|---------------------------------|-----|----------------------------|----|--|-----|
| 201                             | 2   | 301                        | 3  |  |     |
| 240                             | 2   | 340                        | 2  |  |     |
| 270                             | 1   | 356                        | 3  |  |     |
| One of: 236, 330, 331, 332, 333 | 1½  | One of: 330, 331, 332, 333 | 1½ |  |     |
| M E 120 or 121                  | 1   | ED-D 401                   | 1½ |  |     |
| M E 201                         | 1½  | M E 220 or 221             | 1  |  |     |
| M E 216                         | 2   | M E 301                    | 1½ |  |     |
| M E 402                         | 1½  | M E 316                    | 1  |  |     |
| Music history elective          | 3   |                            |    |  |     |
|                                 | 15½ |                            |    |  | 14½ |



**Year 4 (Degree Year)**

|                           |    |
|---------------------------|----|
| Two of: 401A, 401B, 401C, |    |
| 401D                      | 3  |
| 440                       | 2  |
| One of: 330, 331, 332     |    |
| 333                       | 1½ |
| ED-D 406                  | 3  |
| ME 401                    | 1½ |
| Music or non-             |    |
| music elective            | 3  |
|                           | 14 |

See Ensemble Requirements below.

**Major in Music Education — Secondary (Choral)**

| Year 2               |     | Year 3             |    |
|----------------------|-----|--------------------|----|
| 201                  | 2   | 301                | 3  |
| 240                  | 2   | 340                | 2  |
| 270                  | 1   | 356                | 3  |
| ME 121               | 1   | ME 319             | 1½ |
| ME 201               | 1½  | ME 221             | 1  |
| ME 216               | 2   | ME 301 or ED-P 398 | 1½ |
| Second Teaching Area | 3   | ED-D 406           | 3  |
| Music or non-        |     |                    |    |
| music elective       | 3   |                    |    |
|                      | 15½ |                    | 15 |

**Year 4 (Degree Year)**

|                           |    |                            |  |
|---------------------------|----|----------------------------|--|
| 320 or Music History      |    | Year 5 (Professional Year  |  |
| elective                  | 3  | in Education)              |  |
| Two of: 401A, 401B, 401C, |    |                            |  |
| 401D                      | 3  |                            |  |
| 440                       | 2  | See Special Music Program, |  |
| One of ME 221,            |    | p. 174, for course         |  |
| 321 or 421                | 1  | requirements.              |  |
| ED-P 498 or ME 401        | 1½ |                            |  |
| ED-D 401                  | 1½ |                            |  |
| Nonmusic elective         |    |                            |  |
| (2nd teaching area)       | 3  |                            |  |
|                           | 15 |                            |  |

See Ensemble Requirements below.

**Major in Music Education — Elementary**

| Year 2      |    | Year 3                     |     |
|-------------|----|----------------------------|-----|
| 201         | 2  | 301                        | 3   |
| 240         | 2  | 340                        | 2   |
| 270         | 1  | *ME 319                    | 1½  |
| ME 219      | 1½ | One of ME 350,             |     |
| ME 300      | 1½ | 400B, 400C                 | 1½  |
| ME 306      | 3  | MATH 160 A and B (or other |     |
| History 130 | 3  | approved Math)             | 3   |
| Elective    | 3  | ED-B 430                   | 1½  |
|             |    | Music elective             | 3   |
|             | 17 |                            | 15½ |

\* not required for students whose principal performance area is voice. Replace with an approved music education elective.

**Year 4 (Degree Year)**

|                           |     |                           |  |
|---------------------------|-----|---------------------------|--|
| Two of: 401A, 401B, 401C, |     | Year 5 (Professional Year |  |
| 401D                      | 3   | in Education)             |  |
| 440                       | 2   |                           |  |
| One of: ME 303A,          |     | See Special Music         |  |
| 303C, 303D                | 1½  | Program, page 167,        |  |
| One of: ME 350,           |     | for course requirements.  |  |
| 400B, 400C                | 1½  |                           |  |
| ED-B 331                  | 1½  |                           |  |
| ED-D 403                  | 4½  |                           |  |
| ED-P 387                  | 1½  |                           |  |
| Total                     | 15½ |                           |  |

See Ensemble Requirements below.

**ENSEMBLE REQUIREMENTS**

All students in the B.Mus. program are required to participate in ensembles as follows:

**Major in Composition and Theory**

Year 2: 280 or 281  
 Year 3: One of: 280, 380, 281, 381  
 Year 4: One of: 280, 380, 480, 281, 381, 481

**Major in Music History and Literature**

Year 2: 280 and 281  
 Year 3: 380 and 381  
 Year 4: 480 and 481

**Major in Comprehensive Program**

Year 2: 280 and 281  
 Year 3: 380 and 381  
 Year 4: 480 and 481

**Major in Performance**

- (a) **Orchestral Instruments**  
 Year 2: 280 (Orchestra or Wind Symphony) and 281  
 Year 3: 380 (Orchestra or Wind Symphony) and 381  
 Year 4: 480 (Orchestra or Wind Symphony) and 481
- (b) **Keyboard Instruments and Guitar**  
 Year 2: 280 (Chorus) and 281  
 Year 3: 381  
 Year 4: 481
- (c) **Voice**  
 Year 2: 280 and 281  
 Year 3: 380 and 381  
 Year 4: 480 and 481

**Major in Music Education — Secondary (Instrumental and Choral)**

Year 2: 280  
 Year 3: 380 and 281  
 Year 4: Two of: 480, 381, ME 218

**Major in Music Education — Elementary**

Year 2: 280  
 Year 3: 281  
 Year 4: 380 and 381

**UNDERGRADUATE COURSES**

Not all courses can be offered every year. A list of available courses can be obtained from the School of Music each Spring.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

\* Approved for elective credit in the Faculty of Arts and Science.

**\*MUS 107 (1½) TOPICS IN POPULAR MUSIC**

Topics will vary in different years, and may include film music, rock music, folk music, or a specific performer or performing group. (May be taken more than once to a maximum of three units) (Not for credit in the B.Mus. program) S(3-0)

**\*MUS 111 (1½) ELEMENTARY MATERIALS OF MUSIC**

An introduction to the rudiments of music, including pitch and rhythmic notation, basic harmonic language, and a study of the elementary principles of melodic writing and harmony. (Not for credit in the B.Mus. program) FS(3-0)

**\*MUS 115 (3) LISTENING TO MUSIC**

A course for the nonprofessional, designed to enhance understanding and appreciation of Western music. Assignments include listening to recordings and attendance at selected University concerts. (Not open to B.Mus. students) Y(2-1)

**MUS 207 (1½) MUSIC, SCIENCE AND COMPUTERS**An investigation into the historical relationships among music, science and technology, leading to current possibilities in computers and music. The course will focus on the use of computers in music composition, analysis and synthesis of sound. Open to all students. *No prerequisites*, though some musical and/or mathematical background is extremely helpful. S(3-0)



**\*MUS 215 (3) TWO COMPOSERS**

Intended for the general listener. In each term, the music of a major composer will be studied, affording comparison of two eras, styles, aesthetics and/or genres, as well as a broad view of each composer's representative works in several media. For example: Beethoven and Stravinsky; Mozart and Duke Ellington; Monteverdi and Wagner. (*Prerequisite*: 115) (Not open to B.Mus. students) NO(3-0)

**\*MUS 216 (1½) TOPICS IN MUSIC APPRECIATION**

Intended for the general listener. Topics will vary in different years, and may include the study of symphonic literature, the history of opera, the relationship between music and text, or the social context of music. (May be taken more than once) (Not for credit in the B.Mus. program) NO(3-0)

**LANGUAGE OF MUSIC****\*MUS 101A (1) INTRODUCTION TO LANGUAGE OF MUSIC**

The rudiments of music, musical notation and an introduction to strict counterpoint. (*Prerequisite*: Evidence of musicianship acceptable to the School) (Not open to students with credit in 100 or 100A) (*Corequisite*: 170) F(3-0)

**\*MUS 101B (1) LANGUAGE OF MUSIC: I**

A continuation of 101A, introducing harmonic concepts and practices. (Not open to students with credit in 100 or 100B.) (*Prerequisite*: 101A or permission of the School. *Corequisite*: 170) S(3-0)

**MUS 170 (1) BASIC MUSICIANSHIP: I**

Beginning sight-singing, dictation and corresponding keyboard skills. (*Corequisite*: 101A or 101B) Y(0-3)

**\*MUS 201 (2) LANGUAGE OF MUSIC: II**

The structural principles, harmonic and contrapuntal practices of tonal music, with particular attention to the music of the late 18th and the 19th centuries, explored through analysis and composition. (*Prerequisite*: 101B or permission of the School. *Corequisite*: 270) (Not open to students with credit in 300) Y(3-0)

**MUS 270 (1) BASIC MUSICIANSHIP: II**

A continuation of 170. (*Corequisite*: 201 or permission of the School) Y(0-3)

**MUS 301 (3) (formerly 400) LANGUAGE OF MUSIC: III**

Theory, techniques and practice of 20th century music. (Not open to students with credit for 400) (*Prerequisite*: 101B or permission of the School) Y(3-0)

**MUS 401A (1½) TOPICS IN ANALYSIS**

The study of a particular analytical approach (e.g. Rameau, Schenker) and its applications to a variety of musics. (May be taken more than once for credit in different areas) (*Prerequisite*: 201 or permission of the School) S(3-0)

**MUS 401B (1½) BAROQUE COUNTERPOINT**

The contrapuntal language of J.S. Bach, his contemporaries and immediate predecessors, explored through writing and analysis. (*Prerequisite*: 201 or permission of the School) F(3-0)

**MUS 401C (1½) ACOUSTICS OF MUSIC**

The physics of musical sound and the acoustics of musical instruments. Timbre, scales, tuning and temperament. An introduction to psychoacoustical issues. (*Prerequisite*: 201 or permission of the School) F(3-0)

**MUS 401D (1½) JAZZ THEORY**

Theoretical aspects of jazz, including its harmonic and formal characteristics. (*Prerequisite*: 201 or permission of the School) S(3-0)

**COMPOSITION****MUS 105 (2) INTRODUCTION TO COMPOSITION**

This course is designed to enhance one's understanding of and development in compositional systems, processes and techniques through written exercises and assignments related to 20th century musical idioms. (Open to all music students; nonmusic students by permission of the School) Y(2-0)

**MUS 204 (2) MUSIC COMPOSITION FOR NONMAJORS: I**

Composition class for nonmajors. (Attendance at the Master Class Seminar required.) (*Prerequisite*: 105 or permission of the School) Y(1-1)

**MUS 205 (3) MUSIC COMPOSITION: I**

Individual lessons with members of the Music Composition faculty. Compositions for solo and small ensembles. (Attendance required at Composition Master Class Seminar. For Music Composition majors.) (*Prerequisite*: Admittance to Music Composition major) Y(2-1)

**MUS 304 (2) MUSIC COMPOSITION FOR NONMAJORS: II**

Composition class for nonmajors. (Attendance at the Master Class Seminar required.) (*Prerequisite*: 204 or 205 or permission of the School) Y(1-1)

**MUS 305 (3) MUSIC COMPOSITION: II**

Individual lessons with members of the Music Composition faculty. Compositions for solo, small and large ensembles. (Attendance required at Master Class Seminar. For Music Composition majors.) (*Prerequisite*: 205 or permission of the School) Y(2-1)

**MUS 306 (1½) RECORDING TECHNIQUES**

Introduction to the theory and practice of recording and audio technology, including microphones, tape machines, mixers and other studio components. Also introduces the use of computers in modern studio recording and processing. Practical work includes recording sessions and work in a studio. (*Prerequisite*: Permission of the School) F(2-4)

**MUS 307 (1½) INTRODUCTION TO COMPUTER MUSIC**

Introduction to electroacoustic and computer music. Practical experience in a computer music studio, with synthesizers, samplers, MIDI, digital audio, and other computer music techniques. (*Prerequisite*: 306 and permission of the School) S(2-4)

**MUS 404 (2) MUSIC COMPOSITION FOR NONMAJORS: III**

Composition class for nonmajors. (Attendance at the Master Class Seminar required.) (*Prerequisite*: 304 or 305 or permission of the School) Y(1-1)

**MUS 405 (3) MUSIC COMPOSITION: III**

Individual lessons with members of the Music Composition faculty. Majors will complete and have performed a graduating work of advanced and significant scope. (Attendance at Master Class Seminar required. For Music Composition majors.) (*Prerequisite*: 305 or permission of the School) Y(2-1)

**MUS 407 (3) COMPUTER MUSIC SEMINAR**

Advanced work in computer music, including study of software synthesis and analysis of digitized signals, interactive control of synthesizers, and computer-controlled systems. (*Prerequisite*: 307 and permission of the School) Y(0-3)

**MUSIC HISTORY AND LITERATURE****\*MUS 110 (3) INTRODUCTION TO MUSIC HISTORY AND LITERATURE**

A survey of music literature with emphasis on Western music from plainsong to the 20th century, in the context of general cultural history. The course assumes some experience in listening as well as familiarity with the rudiments of musical notation. Y(3-1)

**\*MUS 311A (1½) MUSIC OF THE MEDIEVAL PERIOD**

(Enrollment limited) (*Prerequisite*: 110 or permission of the School) NO(3-0)

**\*MUS 311B (1½) MUSIC OF THE RENAISSANCE**

(Enrollment limited) (*Prerequisite*: 110) NO(3-0)

**\*MUS 312 (3) MUSIC OF THE BAROQUE ERA**

A study of music from c. 1600 - c. 1750. (Enrollment limited) (*Prerequisite*: 110) NO(3-0)

**\*MUS 313 (3) MUSIC FROM c. 1730 TO THE LATE 19th CENTURY**

(Enrollment limited) (*Prerequisite*: 110) Y(3-0)



**\*MUS 320A (1½) WORLD MUSIC**

An introduction to Ethnomusicology, focussing on the music of Cuba, Brazil, Ireland, and Jamaica, and the relationship of these musics to the Eastern and Western traditions. (Enrollment limited) (*Prerequisite*: 110) Y(3-0)

**\*MUS 320B (1½) WORLD MUSIC**

An introduction to Ethnomusicology, focussing on the music of India, Indonesia, Africa, Spain/Portugal, and the relationship of these musics to the Eastern and Western traditions. (Enrollment limited) (*Prerequisite*: 110) NO(3-0)

**\*MUS 321 (3) HISTORY OF MUSICAL INSTRUMENTS**

A survey of the development of Western European instruments from antiquity to the present day. (Enrollment limited) (*Prerequisite*: 110) NO(3-0)

**\*MUS 322 (1½ or 3) A COMPOSER'S STYLE AND MUSIC**

A study of works of a major composer in the period from the 15th to 20th centuries. Emphasis will be placed on analysis, style and performance practice. Students may register for this course more than once. (Enrollment limited) (*Prerequisites*: 110 and 101B) F(3-0)

**\*MUS 323 (1½ or 3) FORMS AND GENRES IN MUSIC**

The study of a single musical form or genre, for example, opera, symphony, sonata. (Students may register for this course more than once.) (Enrollment limited) (*Prerequisites*: 110 and 101B) S(3-0)

**\*MUS 324 (1½ or 3) MUSIC IN CANADA**

The history of music in Canada from the time of Cartier (1534) to the present. (Enrollment limited) (*Prerequisites*: 110 and 101B) S(3-0)

**\*MUS 325 (3) THE HISTORY OF JAZZ**

A survey of the development and growth of jazz, with emphasis on the major stylistic periods, the principal soloists and composers and the great recorded performances. An extensive collection of listening assignments will be on reserve in the Music and Audio Department of McPherson Library. (*Prerequisites*: 110 and 101B) NO(3-0)

**\*MUS 326 (1½) TOPICS IN THE HISTORY OF JAZZ**

(Students should consult the School for the topic to be considered.) (May not be available to students with credit in 323, History of Jazz, or 325) NO(3-0)

**MUS 327 (1½) MUSIC CRITICISM AND AESTHETICS**

Study of selected topics dealing with the aesthetics and the criticism of music. Students may register for this course more than once in different topics with permission of the School. Enrollment limited. (*Prerequisites*: 110 and 201) NO(3-0)

**MUS 328A (1½) KEYBOARD LITERATURE 1500-1820**

S(3-0)

**MUS 328B (1½) KEYBOARD LITERATURE 1820-the Present**

A survey of the basic literature of the keyboard from 1500 to the present, with special attention to its place in Western music and culture. (*Prerequisites*: 110 and 101B) (N.B. This course can be taken in any two years with the permission of the School. Students whose principal instrument is not piano may take this course only with permission of the School) NO(1½-0)

**MUS 364 (1½) SONG LITERATURE**

A study of the literature of solo song from 1600 to the present, incorporating musical and literary developments in Western culture. (*Prerequisite*: 110 and 101B) (Students whose principal instrument is not voice may take this only with permission of the School) NO(2-0)

**MUS 390 (1½ or 3) SPECIAL STUDIES**

With the consent of the School, a student who has demonstrated a capacity for independent work may undertake an individual project. (*Prerequisite*: 110) (3-0)

**MUS 490 (1½ or 3) SPECIAL STUDIES**

With the consent of the School, a student who has demonstrated a capacity for independent work may undertake an individual project. (*Prerequisite*: 110) (3-0)

**MUS 499 (3) GRADUATING ESSAY**

For Music History majors only. The graduating essay will be completed under the direction of an individual instructor. After acceptance of the paper by the supervisor, the student will undergo an oral examination on the field covered in the paper. Y(3-0)

**INSTRUMENTAL AND CHORAL TECHNIQUES****MUS 236 (1½) KEYBOARD**

Group instruction in piano. Students who already possess adequate keyboard skills are not permitted to register for this course. One or two terms: (2-2) or (1-1) Y(1-1)

**MUS 330 (1½) STRINGS**

Group instruction in playing all orchestral string instruments. NO(1-1)

**MUS 331 (1½) BRASSES**

Group instruction in playing all orchestral brass instruments. F(2-2)

**MUS 332 (1½) WOODWINDS**

Group instruction in playing all orchestral woodwind instruments. S(2-2)

**MUS 333 (1½) PERCUSSION**

Group instruction in playing all orchestral percussion instruments. Y(2-2)

**MUS 334 (1½) VOICE**

Group instruction in vocal production. NO(2-2)

**MUS 335 (1½) SINGING FOR ACTORS**

Class voice instruction for actors. Offered for Theatre students only. NO(2-0)

**MUS 350 (3) ORCHESTRATION**

Study of instrumentation and orchestration. (*Prerequisite*: 101B) Y(3-0)

**MUS 351 (1½) JAZZ ARRANGING**

The study of basic techniques applicable to arranging/orchestrating for Jazz ensembles. (*Prerequisites*: 201B and permission of the School) NO(2-1)

**MUS 356 (3) INTRODUCTION TO CONDUCTING**

Fundamental conducting techniques as applied to instrumental and vocal music. (*Prerequisite*: Permission of the School) Y(2-1)

**MUS 456 (3) CONDUCTING**

(*Prerequisites*: 356 and audition) Y(2-1)

**APPLIED MUSIC**

Instruction in voice or in an instrument will be provided by the faculty of the School of Music. The courses listed below are normally available only to students registered in the B.Mus. program. B.Mus. students who fail to maintain a load of at least 9 units (12 in the case of performance majors) will be required to withdraw from any course in the 140-440 (or 145-445) series in which they are registered.

**MUS 140 (2) INDIVIDUAL TUITION**

Lessons in instrument or voice. (*Prerequisite*: Evidence of marked musical ability demonstrated by audition) Y(0-1)

**MUS 141 (1) INDIVIDUAL TUITION IN A SECONDARY INSTRUMENT OR VOICE**

Lessons in a secondary instrument or voice for exceptional students. May be taken more than once in the same or a different performance area for 1 credit per year to a maximum of 3 credits. Available only with permission of the School. Y(0-½)

- 141A Strings
- 141B Woodwinds
- 141C Brasses
- 141D Percussion
- 141E Voice
- 141F Keyboards



**MUS 142 (1½) LYRIC DICTION**

A study of the basic phonetics and accepted principles of lyric diction of the most commonly used languages in concert and operatic repertoire: Italian, French, German, English. Emphasis on performance. NO(2-0)

**MUS 145 (3) SEMINAR IN PERFORMANCE**

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (*Prerequisite:* Recommendation of the School) (For Performance Majors only) Y(1-2)

**MUS 240 (2) INDIVIDUAL TUITION**

Lessons in instrument or voice. (*Prerequisite:* 140) Y(0-1)

**MUS 245 (6) SEMINAR IN PERFORMANCE**

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (*Prerequisite:* 140 or 145, and recommendation of the School) (For Performance Majors only) Y(1-2)

**MUS 340 (2) INDIVIDUAL TUITION**

Lessons in instrument or voice. (*Prerequisite:* 240) Y(0-1)

**MUS 345 (6) SEMINAR IN PERFORMANCE**

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (*Prerequisite:* 245 or permission of the School) (For Performance Majors only) Y(1-2)

**MUS 360 (1½) SEMINAR IN CHAMBER MUSIC WITH PIANO**

Principles of ensemble playing demonstrated through a wide range of repertoire from the Baroque era to the present. (May be taken more than once at the discretion of the School) (*Prerequisite:* 240 or 245, or permission of the School) Y(1½-0)

**MUS 361 (1½) ISSUES IN PIANO PEDAGOGY**

Selected issues and trends in piano pedagogy and interpretation. (May be taken more than once at the discretion of the School) (*Prerequisite:* 240 or 245, or the permission of the School) NO(1½-0)

**MUS 362 (1½) VOCAL PEDAGOGY**

A study of the principles of vocal pedagogy with reference to differences in the main national schools of singing. Physiology, principles of

acoustics, and current trends in voice research will be addressed. (Open to non-voice students with permission of the School) NO(2-0)

**MUS 440 (2) INDIVIDUAL TUITION**

Lessons in instrument or voice. (*Prerequisite:* 340) (This course may be taken a second time by students in a fifth year of study who have the consent of the Dean of Fine Arts. Such students may be required to participate in ensembles.) Y(0-1)

**MUS 445 (6) SEMINAR IN PERFORMANCE**

Individual tuition and weekly class including discussion of repertoire, pedagogy, and techniques of ensemble performance. (*Prerequisite:* 345) (For Performance Majors only) Y(1-2)

**MUS 447 (3) GRADUATING RECITAL**

(*Prerequisite:* 345) (For Performance Majors only) (Not offered after 1995-96) Y

**MUS 448 (1) GRADUATING RECITAL**

(*Prerequisite:* 345) (For Performance Majors only) Y(Grading: COM, N OR F)

**PERFORMANCE GROUPS**

|                                  |        |
|----------------------------------|--------|
| <b>MUS 180 (1) ENSEMBLES</b>     | Y(0-4) |
| <b>MUS 181 (1) CHAMBER MUSIC</b> | Y(0-3) |
| <b>MUS 280 (1) ENSEMBLES</b>     | Y(0-4) |
| <b>MUS 281 (1) CHAMBER MUSIC</b> | Y(0-3) |
| <b>MUS 380 (1) ENSEMBLES</b>     | Y(0-4) |
| <b>MUS 381 (1) CHAMBER MUSIC</b> | Y(0-3) |
| <b>MUS 480 (1) ENSEMBLES</b>     | Y(0-4) |
| <b>MUS 481 (1) CHAMBER MUSIC</b> | Y(0-3) |

180-480, Ensembles, include the University Orchestra, University Wind Symphony, University Chorus, and University Chamber Singers.

181-481, Chamber Music, include the standard chamber groups as well as Collegium Musicum, New Music Ensemble (Sonic Lab), Opera Ensemble, Big Band, Brass Choir, Clarinet Choir, and Accompanying.

480 and 481 may be taken a second time by students in a fifth year of study who have the consent of the Dean of Fine Arts.

## DEPARTMENT OF THEATRE

Giles W. Hogya, B.A. (Miami), M.A., Ph.D. (Northw.), Professor and Chair of the Department

Michael R. Booth, B.A. (Brit. Col.), M.A., Ph.D. (Lond.), Professor

Alan Hughes, B.A., M.A. (Tor.), Ph.D. (Birm.), Professor

John F. Krich, A.B. (Baldwin-Wallace), M.F.A. (Yale), Associate Professor

Harvey M. Miller, B.S., M.Ed., M.A., Ph.D. (Pitt.), Associate Professor

Juliana M. Saxton, B.A. (Tor.), Associate Professor

Allan Stichbury, B.F.A. (Alta.), Associate Professor

Linda Hardy, B.A. (Brock), M.A. (Tor.), Assistant Professor

Sheila M. Stowell, B.A. (Brit. Col.), M.A. (Tor.), LL.B., Ph.D. (Brit. Col.), Assistant Professor

N. Bindon Pingham, Senior Academic Assistant and Part time Lecturer

Kazimierz Piesowocki, Senior Academic Assistant and Part time Lecturer

Gysbertus A. Timmermans, B.F.A., M.F.A. (U. of Vic.), Senior Academic Assistant and Part time Lecturer

Marnie J. Crowe, Senior Academic Assistant

Sandra Guerreiro, B.F.A. (U. of Vic.), Senior Academic Assistant

Charles A. Procure, B.A. (Dal.), Senior Academic Assistant

Karla D. Stout, B.A. (McG.), LL.B. (York), Senior Academic Assistant

Stephen Vrooman, Senior Academic Assistant

**Visiting, Adjunct and Cross-listed Appointments:**

Murray D. Edwards, B.A. (Sask.), M.A., Ph.D. (Col.), Adjunct Professor (1993-95)

Morgan Gadd, B.A. (Leth.), M.F.A. (U. of Vic.), Visiting Lecturer (1994-95)

### ARTS COOPERATIVE EDUCATION PROGRAM

The Department of Theatre participates in the Arts Cooperative Education program. Details are outlined on page 227.

### GRADUATE PROGRAMS

For information on studies leading to the M.A. and M.F.A. degrees, see page 363.

### UNDERGRADUATE PROGRAMS

The Bachelor of Fine Arts in Theatre is an extensive program intended for students who wish to continue their studies in graduate or professional schools and who wish to prepare for a career in community, educational or professional theatre. The philosophy of the Theatre Department is based on the concept that the complex art of the theatre should be studied in all aspects and that by its nature it must be studied in performance.

Through all courses and productions the students learn the fundamental performing and technical skills as they study the historical, contemporary and educational theories and practices of the theatre arts.

The Department offers the undergraduate student a choice between an Honours Program in Theatre History and a Theatre Major Program; in the latter, Comprehensive and Special options including Coop are available (see Program of Courses).

Students will be required to take part in rehearsals and performances associated with departmental projects. No student may register in an evening course without the permission of the Department.



**Theatre Work Outside the Department:** The Department does not prohibit students from taking part in external theatre activities, but it is concerned that such activities may affect a student's studies. Therefore, all theatre students must consult either their departmental adviser or the Chair before accepting any major theatre commitment not related directly to Department of Theatre activities. They should consider the extent of the projected commitment in time and energy, with particular attention to the following:

1. the number of classes which may have to be missed;
2. whether course assignments can be completed by deadline;
3. whether tests, quizzes or examinations will be missed.

## ADMISSION PROCEDURES

Enrollment in the Bachelor of Fine Arts in Theatre program is limited at the present time.

Students are admitted to the Department of Theatre subject to the annual approval of the Department Chair. Approval will be granted if performance in, and suitability for, the program is satisfactory.

### 1. Applicants from Secondary School

Students must apply to Admissions Services for acceptance to the University and in addition must take separate application to the Theatre Department. Details of the letter of application may be obtained from the Secretary of the Department. An interview (and therefore a campus visit) may be required. Interviews are held each year, normally beginning in late May. Students are urged to apply as early as possible since places cannot be guaranteed for qualified applicants once positions are filled.

### 2. Applicants from Other Universities and Colleges

The procedure is the same as that described in the preceding paragraph. The Director of Admissions will consult the Department for advice on transfer credit for theatre courses that have been completed elsewhere. This credit and the Department admission procedures will determine into which year of studies the student will be accepted.

## PROGRAM OF COURSES

To graduate with a B.F.A. in Theatre, students must complete 60 units of course work of which at least 30 units will be in Theatre and no fewer than 15 outside the Department. In accordance with regulations on page 20, at least 21 units must be numbered at the 300 or 400 level; in addition, at least 15 such units at 300 or 400 level must be in Theatre.

In the first year, students will be required to take Theatre 105, 110, 120 and three units of English. English 115/116 or 121/122 are mandatory for those students planning to enter the Faculty of Education at a future date. In subsequent years the student will be required to complete Theatre 205, 210, 211 and at least 4½ units in the following courses: Theatre 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414. Additional required courses are outlined in the Honours and Theatre Major Program below.

In second year each student will be assigned an adviser who will develop a program of studies related to the student's needs and abilities. Students may choose either a Theatre Major Program or the Honours Program in Theatre History.

## THEATRE MAJOR PROGRAM

Students who choose the Theatre Major Program must select one of two program options: 1) Comprehensive or 2) Special (Acting, Directing, Design, Production and Management, Theatre/Drama in Education, Theatre History). Acceptance and continuance in a Special Program is subject to approval by the Department.

A student in a Special Option normally must complete at least thirty-six units of Theatre course work, of which at least nine units must be in the student's specialization and three units in a related area as determined by the student's adviser. The thirty-six units of Theatre courses must also include the required courses listed above.

**Comprehensive Option:** Those students who wish to enroll in a course of study which will permit the exploration of a wide range of techniques and aspects of Theatre, in a generalized approach, should choose the Comprehensive Option.

**Special Option:** Students wishing to emphasize a particular aspect of Theatre should choose the Special Option. This permits the student to concentrate upon one of six specific areas: Acting, Directing, Design, Production and Management, Theatre/Drama in Education, Theatre History.

Students may enter the Option in Acting at the beginning of the third year. Enrollment is normally limited to twelve students per year by selection and is probationary for two weeks. Since enrollment in 221, 222, 223, and 225 is limited to 15 students per section, a selection must take place at the end of the first year. However, admission to second and third year acting courses does not guarantee permission to enter or to continue in the Option. Transfer students who signify their intent to enter this special Option must audition, normally before the beginning of the academic year.

A student wishing to enter the Option in Theatre/Drama in Education required in Education should be aware that several choices exist within the Option, and that to ensure admission to the required third year courses it may be necessary to satisfy prerequisites in the second year. All students wishing to enter the Option should therefore see an academic adviser before registering for second year.

Enrollment is limited in the Directing option. Normally, students must have a cumulative GPA of 5.00.

Students may enter the Option in Production and Management at the beginning of the third year. Enrollment is limited; selection is by interview.

### Acting

| First Year |    | Second Year |    |
|------------|----|-------------|----|
| 105        | 3  | 205         | 3  |
| 110        | 3  | 210         | 1½ |
| 120        | 3  | 211         | 1½ |
| English    | 3  | 221         | 1½ |
| Electives  | 3  | 222         | 1½ |
|            | 15 | 223         | 1½ |
|            |    | 225         | 1½ |
|            |    | Electives   | 3  |
|            |    |             | 15 |

### Third Year

| Third Year          |          | Fourth Year         |          |
|---------------------|----------|---------------------|----------|
| 321                 | 1½       | 421                 | 1½       |
| 322                 | 1½       | 422                 | 1½       |
| 323                 | 1½       | 423                 | 1½       |
| 324                 | 1½       | 424                 | 1½       |
| 325                 | 1½       | 425                 | 1½       |
| 326                 | 1½       | 426                 | 1½       |
| 309, 310, 311, 312, |          | 309, 310, 311, 312, |          |
| 313, 314, 315       |          | 313, 314, 315,      |          |
| 316, 317, 318,      |          | 316, 317, 318       |          |
| 319, 410, 411,      |          | 319, 410, 411,      |          |
| 414                 | 1½ or 3* | 414                 | 1½ or 3* |
| Electives           | 4½ or 3  | Electives           | 4½ or 3  |
|                     | 15       |                     | 15       |

### Audition required

### Directing

| First Year |    | Second Year                 |    |
|------------|----|-----------------------------|----|
| 105        | 3  | 205                         | 3  |
| 110        | 3  | 210                         | 1½ |
| 120        | 3  | 211                         | 1½ |
| English    | 3  | 355                         | 1½ |
| Electives  | 3  | 356                         | 1½ |
|            | 15 | Electives                   | 6  |
|            |    | (221 & 222 are recommended) | 15 |



|  |          |  |          |   |   |  |       |     |
|--|----------|--|----------|---|---|--|-------|-----|
| <b>Third Year</b>  |          | <b>Fourth Year</b>   |          | <b>Theatre/Drama in Education — Elementary</b>  |   |  |       |     |
| 309, 310, 311, 312,<br>313, 314, 315,<br>316, 317, 318,<br>319, 410, 411,<br>414 | 1½ or 3* | 309, 310, 311, 312,<br>313, 314, 315,<br>316, 317, 318,<br>319, 410, 411,<br>414       | 1½ or 3* | <b>First Year</b>   |   | <b>Second Year</b>   |       |     |
| 330  | 3        | 431 & 432  | 3        | 105   | 3   | 205  | 3     |     |
| 261  | 1½       | 348 & 349  | 3        | 110   | 3   | 210  | 1½    |     |
| 361 or 362 or 363  | 1½       | Electives  | 6-7½*    | 120   | 3   | 211  | 1½    |     |
| Electives  | 6-7½     |  | 15       | 181   | 3   | ED-B 341   | 1½    |     |
|  | 15       |  |          | Approved English  | 3   | ** Approved electives  | 6     |     |
|  |          |  |          |   |   | ED-P 287   | 1½    |     |
|  |          |  |          |   |   |  | 15    |     |
| <b>Design</b>  |          |  |          | <b>Third Year</b>   |   | <b>Fourth Year</b>   |       |     |
| <b>First Year</b>  |          | <b>Second Year</b>   |          | 309, 310, 311, 312, 313, 314,<br>315, 316, 317, 318   |   | 309, 310, 311, 312, 313, 314,<br>315, 316, 317, 318                        |       |     |
| 105  | 3        | 205  | 3        | 319, 410, 411, 414  | 1½-3*   | 319, 410, 411, 414   | 1½-3* |     |
| 110  | 3        | 210  | 1½       | 330 or 348 & 349  |   | 481  | 3     |     |
| 120  | 3        | 211  | 1½       | or 355 & 356 or 261 & one of  |   | 394  | 1½    |     |
| English  | 3        | 251  | 1½       | 361/362/363   | 3   | Elective   | 1½    |     |
| Electives  | 3        | 252  | 1½       | 383   | 3   | **Approved electives   | 6-7½  |     |
|  | 15       | 261 and one of   |          | 348 & 349 or 355 & 356 or   |   |  | 15    |     |
|  |          | 361/362/363 or   |          | 261 & one of 361/362/363  | 3   |  |       |     |
|  |          | 348 & 349  | 3        | ED-D 305  | 3   |  |       |     |
|  |          | Electives  | 3        | **Approved elective   | 0-1½  |  |       |     |
|  |          |  | 15       |   | 15  |  |       |     |
|  |          |  |          | ** For those wishing to take the Post Degree Professional Program (Elementary) the following courses are required:  |   |  |       |     |
|  |          |  |          |   | Canadian history                              | 3  |       |     |
|  |          |  |          |   | Mathematics                                   | 3  |       |     |
|  |          |  |          |   | Laboratory science (geography not acceptable) | 3  |       |     |
| <b>Third Year</b>  |          | <b>Fourth Year</b>   |          | <b>Theatre/Drama in Education — Secondary</b>   |   |  |       |     |
| 309, 310, 311, 312,<br>313, 314, 315,<br>316, 317, 318,<br>319, 410, 411,<br>414 | 1½ or 3* | 309, 310, 311, 312,<br>313, 314, 315,<br>316, 317, 318,<br>319, 410, 411,<br>414       | 1½ or 3* | <b>First Year</b>   |   | <b>Second Year</b>   |       |     |
| 351 & 352 or<br>348 & 349 or<br>261 and one of<br>361/362/363                    | 3        | 351 & 352 or<br>348 & 349 or<br>261 and one of<br>361/362/363 or<br>two of 361/362/363 | 3        | 105   | 3   | 205  | 3     |     |
| 330  | 3        | Electives  | 6-7½     | 110   | 3   | 210  | 1½    |     |
| Electives  | 6-7½     |  | 15       | 120   | 3   | 211  | 1½    |     |
|  | 15       |  |          | 181   | 3   | Theatre elective   | 3     |     |
|  |          |  |          | Approved English  | 3   | Electives  | 6     |     |
|  |          |  |          |   | 15  |  | 15    |     |
| <b>Production and Management</b>   |          |  |          | <b>Third Year</b>   |   | <b>Fourth Year</b>   |       |     |
| <b>First Year</b>  |          | <b>Second Year</b>   |          | 309, 310, 311, 312, 313, 314,<br>315, 316, 317, 318,<br>319, 410, 411, 414  | 1½*   | 309, 310, 311, 312, 313, 314,<br>315, 316, 317, 318,<br>319, 410, 411, 414 | 3*    |     |
| 105  | 3        | 205  | 3        | 330   | 3   | 348 & 349 or 355 & 356 or<br>261 & one of 361/362/363                      | 3     |     |
| 110  | 3        | 210  | 1½       | 383   | 3   | 482  | 3     |     |
| 120  | 3        | 211  | 1½       | ED-D 406  | 3   | Electives  | 6     |     |
| English  | 3        | 251  | 1½       | ED-B 371  | 3   |  | 15    |     |
| Electives  | 3        | 252  | 1½       | ED-P 398  | 1½  |  |       |     |
|  | 15       | 299 or elective  | 3        |   | 15  |  |       |     |
|  |          | Electives  | 3        |   |   |  |       |     |
|  |          |  | 15       |   |   |  |       |     |
| <b>Third Year</b>  |          | <b>Fourth Year</b>   |          | Students considering entrance to the Post Degree Professional Program must consult the Education Advising Centre to ensure that they take the appropriate courses for their second teaching option. |   |  |       |     |
| 305  | 3        | 405  | 3        | * Students are required to take a minimum of 4½ units of Theatre History from this list. Students are reminded that a minimum of 15 units of elective credit must be taken outside the Department.  |   |  |       |     |
| 309, 310, 311, 312,<br>313, 314, 315,<br>316, 317, 318,<br>319, 410, 411,<br>414 | 1½ or 3* | 309, 310, 311, 312,<br>313, 314, 315,<br>316, 317, 318,<br>319, 410, 411,<br>414       | 1½ or 3* | <b>Theatre History</b>  |   |  |       |     |
| 348 & 349 or<br>351 & 352 or<br>261 and one of<br>361/362/363                    | 3        | 348 & 349 or<br>351 & 352 or<br>261 and one of<br>361/362/362                          | 3        | <b>First Year</b>   |   | <b>Second Year</b>   |       |     |
| 395  | 3        | 499  | 3        | 105   | 3   | 205  | 3     |     |
| Electives  | 1½ or 3  | Electives  | 1½ or 3  | 110   | 3   | 210  | 1½    |     |
|  | 15       |  | 15       | 120   | 3   | 211  | 1½    |     |
|  |          |  |          | English   | 3   | Electives  | 9     |     |
|  |          |  |          | Electives   | 3   |  | 15    |     |
|  |          |  |          |   | 15  |  |       |     |
|  |          |  |          | <b>Third and Fourth Years</b>   |   |  |       |     |
|  |          |  |          | 309, 310, 311, 312, 313, 314,<br>315, 316, 317, 318, 319,<br>410, 411, 414,   |   |  |       | 7½  |
|  |          |  |          | 490   |   |  |       | 3   |
|  |          |  |          | Approved electives  |   |  |       | 6   |
|  |          |  |          | Electives   |   |  |       | 13½ |
|  |          |  |          |   |   |  |       | 30  |



## THEATRE/Writing OPTION

Entrance to the Theatre/Writing Option may be made through either department. Acceptance into the program is subject to approval of both departments. Enrolment is limited. If a student does not go on in the Theatre/Writing Option program and wishes to remain in Theatre, they will have to complete the general requirements for the BFA in the Comprehensive Option in Theatre as described in the university calendar. Students enrolled in Writing with a Theatre Option must maintain at least a B- in order to complete a degree in Writing.

Students in the Theatre/Writing Option Program must complete at least 40.5 units of required course work from Theatre and Writing as below.

| First Year     |         | Second Year          |           |
|----------------|---------|----------------------|-----------|
| WRIT 100       | 3       | WRIT 203             | 3         |
| THEA 105       | 3       | WRIT 200, 201 or 202 | 3         |
| THEA 110       | 3       | THEA 210             | 1½        |
| THEA 120       | 3       | THEA 211             | 1½        |
| English        | 3       | THEA 261, 348, 349,  |           |
|                | 15      | 355, 356             | 3         |
|                |         | Electives            | 15        |
| Third Year     |         | Fourth Year          |           |
| WRIT 305       | 1½/1½   | WRIT 403             | 1½        |
| THEA 330       | 3       | THEA Electives       | 1½ or 3*  |
| THEA 309, 310, |         | WRIT Electives       | 4½ or 6*  |
| 311, 312, 313, |         | Electives            | 4½ or 6** |
| 314, 315, 316, |         |                      | 15        |
| 317, 318, 319, |         |                      |           |
| 410, 411, 414  | 3       |                      |           |
| WRIT Electives | 3 or 6* |                      |           |
| Electives      | 3**     |                      |           |
|                | 15      |                      |           |

In Third and Fourth Years, students *must* take a minimum of 9.0 units of Writing electives at the 300 or 400 level.

Theatre/Writing Option students must take a minimum of 1.5 units of THEA 414 (Studies in Canadian Theatre and Drama) if it is offered.

It is recommended that students take THEA 181 as an elective.

\* Students will complete this program by enrolling in either Writing or Theatre elective courses suited to their particular interests or abilities and with the advice of both departments.

\*\* In some cases, electives outside either department may be approved.

### B.A. HONOURS PROGRAM IN THEATRE HISTORY

The Honours Program normally begins in a student's third year. Students may apply to enter the Honours program after the completion of a minimum of 6 units of course work in Theatre with a G.P.A. in these courses of 5.00 (B) or better. To graduate with a B.A. Honours in Theatre History, a minimum of 30 units of Theatre is required; at least 15 units shall be in designated Theatre History courses at 300 and 400 level listed below, and 6 units in approved, related disciplines.

Designated Theatre History courses are THEA 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 410, 411, 414, 390, 391, 392, 490.

To receive a "with distinction" Honours degree a student must obtain an average of at least A- (7.00) in designated Theatre History courses at 300 and 400 level, and have a graduating average of at least 6.50.

A third year Honours student whose performance falls below a G.P.A. of 3.50 in that year, or of 5.00 in designated Theatre History courses, will normally be required to withdraw from the Honours program.

A fourth year student whose graduating grades are lower than 3.5, but who otherwise meets the University's requirements for graduation, will receive a B.F.A. in the Special Program in Theatre History if the B.F.A. requirements have been met.

### UNDERGRADUATE COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

#### \*THEA 101 (3) AN INTRODUCTION TO THEATRE

A practical and theoretical introduction to play analysis, to dramatic criticism, to theatrical form, and to the principles of stage production. Attendance at live performances is required. (Not open to students with credit in Theatre 100 or 110) Y(3-0; 3-0)

#### THEA 127 (1½) STAGE TECHNIQUE FOR VOCAL PERFORMANCE

This course is formulated to meet the specific needs of voice performance students with little or no acting training. Students will be introduced to the language and theory of acting as well as taking part in warm-ups, theatre games and scene work. Not open to students who qualify for THEA 120. NO(1½-0)

#### THEA 150 (1½) SPEECH COMMUNICATION

An overview of the theoretical bases of speech communication; development of the vocal, verbal, and non-verbal skills of organization and presentation essential to effective communication. (Prerequisite: 15 units of University credit) NO(1-3)

### THEATRE HISTORY

#### \*THEA 110 (formerly 100) (3) INTRODUCTION TO THE HISTORY AND LANGUAGE OF THE THEATRE

A survey of the history of western theatre from its beginnings to the closing of the English playhouses in 1642. Early forms, conventions and styles are compared with those of the contemporary theatre. Students are required to attend performances of local theatres. (Prerequisite: Permission of the Department) Y(3-0)

#### \*THEA 210 (formerly half of 200) (1½) THEATRE FROM FRENCH CLASSICISM TO THE END OF THE 19TH CENTURY

A survey of western theatre history from Corneille to the Victorians. Introduction to library research methods in theatre history. (Prerequisite: 110 or permission of the Department) F(3-0)

#### \*THEA 211 (formerly half of 200) (1½) MODERN THEATRE

A continuation of Theatre 210 from the late 19th century to the present day. (Prerequisite: 210 or permission of the Department) S(3-0)

#### THEA 309 (1½) HISTORY OF OPERA

Survey course designed to introduce students to the history of opera from 1600 to the present day. Emphasis will be placed upon composers and librettists who were major influences in the development of the genre. Dramatic style and theory will be addressed. (Prerequisite: THEA 211 or MUS 110) NO(3-0)

#### \*THEA 310 (1½) SEMINAR IN THEATRE HISTORY: I

Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (Prerequisite: 211 or permission of the Department) NO(3-0)

#### \*THEA 311 (1½) SEMINAR IN THEATRE HISTORY: II

Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (Prerequisite: 211 or permission of the Department) NO(3-0)

#### \*THEA 312 (JAPA 320A) (1½) SEMINAR IN JAPANESE THEATRE AND DRAMA: FROM EARLIEST TIMES TO 1500

This course will study early Japanese drama and theatre from its roots in folk and ritual performance. A majority of time will be spent on the study of No drama and the theoretical writings of Zeami, to be read in translation. This will be supplemented by film, video and audio recordings of theatrical productions. A variety of approaches will be taken in class, including: discussion of the plays as literary texts, dramaturgy, staging and performance techniques. (Prerequisite: 211 or permission of the Department) NO(3-0)

#### \*THEA 313 (JAPA 320B) (1½) SEMINAR IN JAPANESE THEATRE AND DRAMA: FROM 1500 TO THE PRESENT DAY

A sequel to 320A. This course will focus on Bunraku and Kabuki, but some reading and study will also be made on developments in 20th century theatre. Readings of plays in translation will be supplemented by screenings of videos and films of stage performances. (Prerequisite: 211 or permission of the Department) NO(3-0)



**\*THEA 314 (formerly 306) (1½) STUDIES IN THEATRE OF THE ANCIENT WORLD**

Theatre in ancient Greece or Rome. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 211 or permission of the Department) NO(3-0)

**\*THEA 315 (formerly 307) (1½) STUDIES IN MEDIEVAL THEATRE**

Theatre of the Middle Ages. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 211 or permission of the Department) NO(3-0)

**\*THEA 316 (1½) STUDIES IN BAROQUE, ROCOCO AND NEOCLASSICAL THEATRE**

Theatre in the 17th and 18th centuries. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 211 or permission of the Department) NO(3-0)

**\*THEA 317 (1½) STUDIES IN 19th CENTURY THEATRE**

Theatre in the 19th century. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 211 or permission of the Department) S(3-0)

This Year: Ibsen and Chekov

A close examination of the major plays of Ibsen and Chekov, with attention paid to the theatrical history and possibilities of the texts.

**\*THEA 318 (1½) STUDIES IN 20th CENTURY THEATRE**

Modern theatre. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 211 or permission of the Department) NO(3-0)

**\*THEA 319 (formerly 308) (1½) STUDIES IN RENAISSANCE THEATRE**

The Renaissance in the theatre of Italy, France and England. (Students should consult the Department for the topic to be considered. This course may be taken more than once in different topics, with permission of the Department.) (Prerequisite: 211 or permission of the Department) NO(3-0)

**\*THEA 410 (1½) SEMINAR IN THEATRE HISTORY: III**

Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (Prerequisites: 211 or permission of the Department) F(3-0)

This Year: Samuel Beckett and Harold Pinter

An intensive study of the plays of Samuel Beckett and Harold Pinter in a theatrical context.

**\*THEA 411 (1½) SEMINAR IN THEATRE HISTORY: IV**

Intensive study of a specific period or genre. The topics for consideration will change each year. Students may take this course for credit more than once. (Students in Arts and Science may take this course once only.) (Prerequisites: 211 or permission of the Department)

M. Booth NO(3-0)

**\*THEA 414 (1½, formerly 3) STUDIES IN CANADIAN THEATRE AND DRAMA**

The Canadian theatre and drama. (Students should consult the Department for the topic to be considered. This course may be taken for credit more than once in different topics, with the permission of the Department.) (Prerequisite: 211 or permission of the Department) F(3-0)

This Year: Drama of George F. Walker

A study of selected plays by Walker, with examination of their production and reception in theatres in Canada and elsewhere.

**ACTING****THEA 120 (3) INTRODUCTION TO THE ART OF ACTING**

An orientation to the art of acting and an introduction to the actor's creative process. (Prerequisite: Permission of the Department) Y(1½-3)

**THEA 122 (1½) THE ACTING EXPERIENCE**

An examination of the fundamentals of the art of acting through self-exploration, improvisation, character and scene study. (Not open to students with credit in THEA 120 or 121) FS(0-3)

**THEA 221 (formerly half of 220) (1½) ACTING: I**

Work in characterization and scene study. (Enrollment limited) (Prerequisites: 120; audition and/or interview; permission of the Department. Corequisite: 223 or 225) F(0-2½-2)

**THEA 222 (formerly half of 220) (1½) ACTING: II**

A continuation of Theatre 221. Work in characterization and scene study. (Enrollment limited) (Prerequisites: 221; audition and/or interview; permission of the Department. Corequisite: 223 or 225) S(0-2½-2)

**THEA 223 (formerly 250) (1½) BEGINNING VOICE**

Basic development of the voice to prepare for speech on the stage. (Enrollment limited to 15 students per section) (Prerequisites: 120; audition and/or interview; permission of the Department. Corequisites: 221 or 222 and 225) FS(0-3)

**THEA 225 (formerly 260) (1½) INTRODUCTION TO STAGE MOVEMENT**

Basic development of the body to prepare for movement on the stage. (Enrollment limited) (Prerequisites: 120; audition and/or interview; permission of the Department. Corequisites: 221 or 222 and 223) FS(0-3)

**THEA 321 (formerly half of 320) (1½) ACTING: III**

The study of acting as related to specific theatrical genres, styles or periods. (Prerequisites: 221, 222, 223, 225; audition and/or interview; permission of the Department. Corequisites: 323 and 324) F(0-2½-2)

**THEA 322 (formerly half of 320) (1½) ACTING: IV**

A continuation of Theatre 321. The study of acting as related to specific theatrical genres, styles or periods. (Prerequisites: 321; audition and/or interview; permission of the Department. Corequisites: 323 and 324) S(0-2½-2)

**THEA 323 (formerly half of 350) (1½) SPEECH IN THE THEATRE: I**

Work in voice and speech as related to specific theatrical genres, styles or periods. (Prerequisites: 221, 222, 223, 225; audition and/or interview; permission of the Department. Corequisites: 321 or 322 and 325 or 326) F(0-2½-2)

**THEA 324 (formerly half of 350) (1½) SPEECH IN THE THEATRE: II**

A continuation of Theatre 323. Work in voice and speech as related to specific theatrical genres, styles or periods. (Prerequisites: 323; audition and/or interview; permission of the Department. Corequisites: 321 or 322 and 325 or 326) S(0-2½-2)

**THEA 325 (formerly half of 360) (1½) STAGE MOVEMENT: I**

Work in movement as related to specific theatrical genres, styles or periods. (Prerequisites: 221, 222, 223, 225; audition and/or interview; permission of the Department. Corequisites: 321 or 322 and 323 or 324) F(0-4½)

**THEA 326 (formerly half of 360) (1½) STAGE MOVEMENT: II**

A continuation of Theatre 325. Work in movement as related to specific theatrical genres, styles or periods. (Prerequisites: 325; audition and/or interview; permission of the Department. Corequisites: 321 or 322 and 323 or 324) S(0-4½)



**THEA 421 (formerly half of 420) (1½) ACTING: V**

Advanced work in special problems in acting. A studio production will normally be mounted each year in either 421 or 422. (*Prerequisites:* 321, 322, 323, 324, 325, 326; audition and/or interview; permission of the Department. *Corequisite:* 423 or 424 and 425 or 426) F(0-2½-2)

**THEA 422 (formerly half of 420) (1½) ACTING: VI**

A continuation of 421. Advanced work in special problems in acting. A studio production will normally be mounted each year in either 421 or 422. (*Prerequisites:* 421; audition and/or interview; permission of the Department. *Corequisites:* 423 or 424 and 425 or 426) S(0-2½-2)

**THEA 423 (formerly half of 450) (1½) SPECIAL STUDIES IN VOICE AND SPEECH FOR THE THEATRE: I**

Advanced work in voice production and speech for the stage. (*Prerequisites:* 321, 322, 323, 324, 325, 326; audition and/or interview; permission of the Department. *Corequisites:* 421 or 422 and 425 or 426) F(0-2½-2)

**THEA 424 (formerly half of 450) (1½) SPECIAL STUDIES IN VOICE AND SPEECH FOR THE THEATRE: II**

A continuation of 423. Advanced work in voice production and speech for the stage. (*Prerequisites:* 423; audition and/or interview; permission of the Department. *Corequisites:* 421 or 422 and 425 or 426) S(0-2½-2)

**THEA 425 (formerly half of 460) (1½) ADVANCED STAGE MOVEMENT: I**

Advanced work in special problems of stage movement. (*Prerequisites:* 321, 322, 323, 324, 325, 326; audition and/or interview; permission of the Department. *Corequisites:* 421 or 422 and 423 or 424) F(0-4½)

**THEA 426 (formerly half of 460) (1½) ADVANCED STAGE MOVEMENT: II**

A continuation of 425. Advanced work in special problems of stage movement. (*Prerequisites:* 425; audition and/or interview; permission of the Department. *Corequisites:* 421 or 422 and 423 or 424) S(0-4½)

\* Approved for elective credit in the Faculty of Arts and Science.

**DIRECTING****THEA 330 (3) DIRECTING: I**

Fundamental textual analysis; stage composition, movement and rhythm; methods of rehearsal procedure and basic techniques of working with the actor. (*Prerequisites:* 120 or 181 and permission of the instructor) Y(3-2)

**THEA 431 (formerly half of 430) (1½) DIRECTING: II**

Advanced work in stage direction with particular emphasis on special problems of style. (*Prerequisites:* 330 and permission of the Department) F(3-0)

**THEA 432 (formerly half of 430) (1½) DIRECTING: III**

A continuation of 431. Advanced work in stage direction with particular emphasis on special problems of style. (*Prerequisites:* 431 and permission of the Department) S(3-0)

**DESIGN AND TECHNICAL PRACTICE****THEA 251 (formerly half of 240) (1½) INTRODUCTION TO DESIGN: I**

Developing a graphic vocabulary in the free hand idiom for the Theatre Designer. (*Prerequisite:* permission of the Department) S(1-3)

**THEA 252 (formerly half of 240) (1½) INTRODUCTION TO DESIGN: II**

Development of drawing skills in the mechanical idiom. Drafting of ground plans, sections, elevations, orthographics, and isometrics. Mechanical perspective drawing will be explored. (*Prerequisite:* permission of the Department) F(1-3)

**THEA 261 (formerly half of 241) (1½) INTRODUCTION TO COSTUME DESIGN: I**

An introduction to the principles, techniques, and materials of costume design for the stage and other media. F(3-0)

**THEA 266 (1½) THEATRICAL MAKEUP: I**

Design and application of stylized theatrical make-up and related simple prosthetics. (Students must purchase the designated make-up kit.) (*Prerequisite:* Theatre 120 or permission of the Department) (Not open to students with credit in 372) NO(3-0)

**THEA 348 (formerly half of 342) (1½) LIGHTING FOR THE THEATRE: I**

Lighting design; its theory and practice. (*Prerequisites:* 105 and permission of the Department) F(3-0)

**THEA 349 (formerly half of 342) (1½) LIGHTING FOR THE THEATRE: II**

A continuation of 348. Lighting design; its theory and practice. (*Prerequisites:* 348 and permission of the Department) S(3-0)

**THEA 351 (formerly half of 340) (1½) INTRODUCTION TO SCENIC DESIGN**

Fundamentals of three dimensional design communication and aesthetics. Model making and other graphic techniques for planning, analyzing and describing plastic space for the stage. (*Prerequisite:* 105, 205, 251, 252, and permission of the Department) F(2-2)

**THEA 352 (formerly half of 340) (1½) SCENIC DESIGN**

Paper projects in the design of stage settings. (*Prerequisite:* 351 and permission of the Department) S(0-4)

**THEA 353 (1½) SPECIAL PROBLEMS IN SCENIC DESIGN**

Assisting the scenic designer of a mainstage production. (May be taken for a credit more than once to a limit of 3.0 units) (*Pre- or corequisites:* 351, 352, and permission of the instructor) FS(0-3)

**THEA 355 (formerly half of 245) (1½) INTRODUCTION TO DESIGN AESTHETICS**

Graphic fundamentals, in both the free hand and mechanical idioms, which are useful to the theatre practitioner for the interpretation and use of stage design. (This course is not intended for students choosing a special option in Design or in Production and Management) (*Prerequisite:* Permission of the Department) F(1-2)

**THEA 356 (formerly half of 245) (1½) DESIGN AESTHETICS**

The use, interpretation, and communication of stage design through paper and practical projects. (*Prerequisite:* 355 and permission of the Department) S(0-3)

**THEA 361 (formerly half of 241) (1½) COSTUME DESIGN: II**

The development of skills needed by the designer of costumes for the theatre and other media. Analysis and rendering techniques. An introduction to techniques of developing designs into completed costumes. (*Prerequisite:* 261) S(3-0)

**THEA 362 (formerly half of 341) (1½) COSTUME HISTORY AND DESIGN: I**

The history of costume and fashion in society and the theatre from ancient times through the 18th century. Analysis and selected designs for plays set in various historical periods. (*Prerequisite:* 261) F(4-0)

**THEA 363 (formerly half of 341) (1½) COSTUME HISTORY AND DESIGN: II**

The history of dress in the 19th and 20th centuries, and its relationship to society and to the theatre, together with an introduction to styles of traditional dress worn today in areas of the world least influenced by Western styles. Continued interpretation of plays in terms of costume design. (*Prerequisite:* 261) S(4-0)

**THEA 364 (1½) THE THEORY AND PRACTICE OF COSTUME PATTERN DRAFTING**

Flat pattern drafting and draping for theatrical costumes. FS(3-0)



**THEA 366 (1½) THEATRICAL MAKEUP: II**

History, theory and design of realistic theatrical make-up and related simple prosthetics. (Students must purchase the designated make-up kit.) (*Prerequisite*: THEA 266) (Not open to students with credit in 372) NO(3-0)

**THEA 453 (1½) SCENIC DESIGN FOR PRODUCTION**

Design for Department productions. (May be taken for credit more than once to a limit of 3.0 units) (*Prerequisites*: 351, 352, and permission of the instructor) FS(0-3)

**THEA 464 (formerly 441) (1½) SPECIAL PROBLEMS IN COSTUME DESIGN**

Special problems in costume design, costume accessories, fabric dying. (*Pre- or corequisites*: 261, 361, 364) NO(3-0)

**THEA 465 (formerly half of 444) (1½) COSTUME DESIGN FOR PRODUCTION**

Supervised design and production in the execution of costumes for theatre production. Students will work with directors on design concepts, carry out research and write reports on their findings; they will then prepare designs and see them through the construction process into production. (May be taken for credit more than once, up to a limit of six units) (*Pre- or corequisites*: 361, 362, 363, 364) FS(2-1)

**PRODUCTION AND MANAGEMENT****THEA 105 (3) AN INTRODUCTION TO STAGECRAFT AND TECHNICAL PRACTICE**

The intensive study and application of the principles of scenery and costume construction, stage lighting and sound, and theatre organization and practise. Practical Assignments will include the preparation and crewing of Department productions. (*Prerequisite*: Permission of the Department) Y(1-4)

**THEA 205 (3) AN INTRODUCTION TO PRODUCTION AND MANAGEMENT AREAS OF THE THEATRE**

Students are instructed in the basic principles and procedures of the major production and management areas of the theatre. Intensive applications in one or more areas are studied. Students will be required to participate as production crew in Department or other designated productions. (Students enrolled in this course must consult the instructor before making evening or lunchtime engagements which might interfere with the schedule of practical assignments.) (*Prerequisites*: 105 and permission of the Department) Y(1-4)

**THEA 305 (1½ or 3) ADVANCED PRODUCTION AND MANAGEMENT**

Students are instructed and given practical experience in one or more of the major production and management areas of the theatre. These may include: costume, stage management, technical direction, sound design, lighting operation, stage carpentry, front of house, publicity. (Enrollment limited) (*Prerequisites*: 205 and permission of the Department) YFS(0-6-2)

**THEA 405 (1½ or 3) SPECIALIZED STUDIES IN PRODUCTION AND MANAGEMENT**

Supervised practical experience in one or two specialized areas of production and management in the theatre. (Enrollment limited) (Students may take this course for credit more than once in different topics.) (*Prerequisites*: 305 and permission of the Department) YFS(0-6-2)

**THEATRE/DRAMA IN EDUCATION****THEA 181 (3) AN INTRODUCTION TO THE DRAMATIC PROCESS**

A course designed for students considering a career in which presentation of self and personal communication are necessary components. This course unites dramatic exploration and theatre forms to develop personal confidence, creative and communication skills through dramatic exploration of games, verbal and nonverbal signalling, role playing and improvisation. Study of texts will be required. (Enrollment limited to 25 students per section) Y(1-4)

**THEA 383 (3) THEATRE FOR YOUNG AUDIENCES**

The history and philosophy, production and performance of theatre for young audiences. This course is designed for teachers who see theatre as a stimulus for classroom learning, and for performance students who wish to acquire skills required for work with classroom audiences. Studio work is required. (*Prerequisite*: 330 and permission of the Department) Y(2-2)

**THEA 481 (formerly 381) (3) DRAMA IN EDUCATION (Grades K-VII)**

A course designed for teachers who wish to use Drama as a method of instruction in the elementary school. A study of a dramatic approach to the teaching of language arts, mathematics and social studies; and an exploration of movement, sound, art and music. Examination of methodology, teaching strategies and unit designs. (*Prerequisites*: 181 and permission of the Department. *Pre- and corequisites*: 383, ED-B 341, ED-D 305, or permission of the Department) Y(2-2)

**THEA 482 (3) (formerly 382) DRAMATIC ARTS IN THE SECONDARY SCHOOL (Grades 8-12)**

A course designed for those teachers who wish to teach Drama as a subject, or to use Drama as a teaching method. This course is intended to bridge the gap between dramatic exploration and dramatic presentation. Game theory, improvisation, role playing, Readers' Theatre, Story Theatre, Anthology and Docudrama. An examination of methods, teaching strategies, and curriculum design with emphasis upon theory, objectives, and extracurricular Drama. NOTE: This course is intended as preparation for the Post-Degree Professional Program in a Faculty of Education. Students wishing to take this course prior to their final undergraduate year require permission of the instructor. (*Prerequisite*: 181) (*Pre- and corequisites*: 330, ED-B 471, ED-P 398, ED-D 406 or permission of the Department) Y(2-2)

**DIRECTED STUDIES**

NOTE: Directed Studies may, with the permission of the Department, be taken for credit more than once.

Students wishing to pursue a course of directed studies must, with a faculty member who is willing to supervise such a course, formulate a proposal accurately describing course content, the intended method and extent of supervision, and the method by which work will be evaluated. The proposal must then receive the approval of the Chair of the Department.

Proposals will normally be subject to the following limitations: the student must have maintained a good G.P.A. and an average of at least B+ in courses directly related to the proposed directed studies; no more than 9 units of directed studies credit will count for credit towards the B.F.A.; no more than 6 units of directed studies will be approved in any single winter session.

**THEA 299 (1½ or 3) THEATRE LABORATORY**

Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. YFS

**\*\*THEA 390 (1½ or 3) DIRECTED STUDIES IN THEATRE HISTORY**  
(*Prerequisites*: 210, 211, and/or permission of the Department) YFS

**\*\*THEA 391 (1½ or 3) DIRECTED STUDIES IN THE HISTORY OF DRAMA**  
(*Prerequisites*: 210, 211, and/or permission of the Department) YFS

**\*\*THEA 392 (1½ or 3) DIRECTED STUDIES IN THEORIES OF ACTING** YFS

**\*\*THEA 393 (1½ or 3) DIRECTED STUDIES IN THEORIES OF DIRECTING**  
(*Prerequisites*: 210, 211, 330, and/or permission of the Department) YFS

**\*\*THEA 394 (1½ or 3) DIRECTED STUDIES IN THEATRE/DRAMA IN EDUCATION**

Individual, supervised research in theatre/drama in education culminating in the production of a specific project either written or practical. YFS

**THEA 395 (1½ or 3) DIRECTED STUDIES IN PRODUCTION AND/OR MANAGEMENT** YFS

**THEA 396 (1½ or 3) DIRECTED STUDIES IN SCENE DESIGN**  
(*Prerequisites*: 251, 252, 351, 352, and permission of the Department) YFS



**THEA 397 (1½ or 3) DIRECTED STUDIES IN COSTUME DESIGN**

(Prerequisites: 362, 363, 364, 464, and permission of the Department)  
YFS

**THEA 398 (1½ or 3) DIRECTED STUDIES IN LIGHTING DESIGN**

(Prerequisites: 348, 349, and permission of the Department)  
YFS

**THEA 399 (1½ or 3) THEATRE LABORATORY**

Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. Supervised performance in department productions will normally be available for credit only to students in the acting specialization.  
YFS

**THEA 490 (1½ or 3) GRADUATING PROJECT**

Students in their final year may take a special project under this number according to their areas of interest and with the permission of the Department.  
YFS

**THEA 499 (1½-6) THEATRE LABORATORY**

Under the supervision of faculty, students will participate in projects that will include both their particular areas of interest and other aspects of the theatre. Supervised performance in department productions will normally be available for credit only to students in the acting specialization.  
YFS

\*\*Students in Arts and Science may take for elective credit only one of the five directed studies courses.

## DEPARTMENT OF VISUAL ARTS

Robert Youds, B.F.A. (U. of Vic.), M.F.A. (York), Associate Professor (Drawing and Painting) and Chair of the Department

Mowry Baden, B.A. (Pomona), M.A. (Stan.), Professor (Sculpture)

Roland Brenner, Post Dip. A.D. (St. Martin's Sch. of Art, Lond.), Professor (Sculpture)

Fred Douglas, Associate Professor (Photography)

Lynda Gammon, B.A. (S. Fraser), M.F.A. (York), Associate Professor (Sculpture, Drawing, Installation)

George W. Tiessen, B.F.A. (Mt. All.), M.F.A. (Corn.), Associate Professor (Printmaking and Painting)

Vikky Alexander, B.F.A. (N.S.C.A.D.), Assistant Professor (Photography)

Sandra Meigs, B.F.A. (N.S.C.A.D.), M.A. (Dal.), Assistant Professor

Patrick George, B.F.A. (U. of Vic.), Senior Academic Assistant

**Visiting, Adjunct and Cross-listed Appointments:**

Elspeth Pratt, B.A., B.F.A. (Man.), M.F.A. (Brit. Col.), Visiting Assistant Professor (1994-95)

### GRADUATE PROGRAM

For information on studies leading to the M.F.A. Degree, see page 366.

### GENERAL INFORMATION

The Department offers two undergraduate programs leading to the degree of B.F.A., Honours or Major, and a two year graduate program leading to an M.F.A.

The academic emphasis of the Department is on contemporary art practices, rather than applied or craft training. The program is designed to provide intensive studio experience in a critical setting pertinent to the pursuit of art in our culture. Studies are enriched by visiting artists and critics and the presence of graduate students from Canada and abroad. In addition to the regular program, the Department offers several courses each summer which are staffed by notable visiting artists.

### ADVICE FOR STUDENTS ENTERING THE DEPARTMENT FOR THE FIRST TIME

**1. From secondary school:**

Complete the usual procedures for admission to the University, as specified elsewhere in this Calendar. The Department will then forward a questionnaire for the student to complete and return to the Visual Arts Department as soon as possible. Application deadline is March 31st. Transcripts in process should be sent to UVic's Admission Services as soon as possible. (Late applications will be considered depending on space available and providing that the general application for UVic has been met.)

Students intending to pursue a degree program in Visual Arts should declare that intention by registering in the Faculty of Fine Arts, Visual Arts Department.

Upon reviewing the student's application, the Department of Visual Arts may request a slide portfolio and perhaps an interview. Students requesting return of portfolio material must provide a stamped, self-addressed envelope.

**2. Transfer from other universities, colleges, and art schools:**

Complete the usual procedures for admission to the University, as specified elsewhere in this Calendar. The Department will then forward an information form for the student to complete and return to the Visual Arts Department. Please return this form as soon as possible. Application deadline is March 31st. Transcripts in progress should be sent to UVic's Admission Services as soon as possible. Final transcripts are due in Admission Services by May 31st. Upon reviewing the student's application, and completed form, the Department of Visual Arts may request a slide portfolio and perhaps an interview. Final notification of acceptance or rejection will be mailed to the student by the end of June. The Director of Admission Services will consult the Department for advice on transfer credit for studio courses completed elsewhere. (Note: normally students will not be admitted into third and fourth year studio courses until their outside elective requirements for first and second year have been met.)

Students requesting return of portfolio material must provide a stamped, self-addressed envelope.

**3. From other programs at the University of Victoria:**

Complete the usual procedures for reregistration, as specified elsewhere in this Calendar. The Department will then forward an information form to the student to complete and return to the Visual Arts Department as soon as possible. Application deadline is March 31st. Transcripts in progress should be sent to UVic's Admission Services as soon as possible. Upon reviewing the student's application, the Department of Visual Arts may request a slide portfolio and perhaps an interview. Final notification of acceptance or rejection will be mailed to the student by the end of June.

Students requesting return of portfolio material must provide a stamped, self-addressed envelope.

### UNDERGRADUATE PROGRAMS

Students who are working towards the B.F.A. degree have the choice of an Honours or a Major program. This permits a choice between an intensive commitment to visual arts (normally 34½ visual arts course units from a degree total of 60); or a combination of visual arts and other University offerings (as few as 28½ visual arts course units from a degree total of 60).

Note: All visual arts studio courses involve a minimum of 3 hours of out of class studio time. Department facilities are available for completion of studio projects.

### HONOURS PROGRAM

Students must normally complete 34½ units of Department offerings as specified below. Of the total of 60 units, at least 21 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art. There is also a weekly 1½ hour seminar requirement which is mandatory for all Honours students. To qualify for the Honours Program a student must have completed 6 units of studio courses at the 300 level (where available) in the chosen discipline, have a B+ average in three third year Visual Arts studio courses, have a first class average in the course or courses identified as prerequisite to the discipline, and



permission of the department. Normally no more than 3 units of other course work may be taken concurrently with Art 499 and no more than 3 units of other course work may be taken after Art 499 for the completion of the B.F.A. Honours Degree.

Note: It is the expectation that, as well as the weekly conference time with the adviser the student will spend a minimum of 24 hours per week in the studio.

#### *First and Second Year Visual Arts Courses*

|              |    |
|--------------|----|
| 100*         | 1½ |
| 101*         | 1½ |
| 150          | 1½ |
| 3 of 110-140 | 4½ |
| 3 of 200-240 | 4½ |

\*Mandatory courses in the first term of first year.

#### *First and Second Year Out of Department Electives*

|                  |    |
|------------------|----|
| History in Art** | 3  |
| Other electives  | 9  |
| Art or electives | 4½ |

\*\* The required 6 units of History in Art may be elected at any time during the 4 years, however students are strongly advised to complete 3 of those 6 units in their first or second year.

(Note: Students will not be admitted into third and fourth year studio courses until their out of department elective requirements for first and second year have been met.)

#### *Third Year Visual Arts Courses*

|                       |   |
|-----------------------|---|
| 300-390               | 9 |
| Electives (any level) | 6 |

#### *Fourth Year Visual Arts Courses*

|                       |    |
|-----------------------|----|
| 499                   | 12 |
| Electives (any level) | 3  |

(Note: electives must include History in Art requirement)

Of the total 60 units, at least 21 units must be chosen from courses numbered 300 or above.

A student who passes all courses but fails to obtain a second class graduating average (3.50) will graduate in the Major Program.

\*\*\* A general University of Victoria regulation requires all students either to pass the qualifying examination in English or to complete certain English courses (see page 15).

Note 1: 390 and 490 may not be taken concurrently

Note 2: Neither 390 nor 490 may be taken concurrently with 499.

### MAJOR PROGRAM

Students must normally complete 28½ units of Department offerings as specified below. At least 24 units must be chosen from outside the Department of Visual Arts, including 6 units of History in Art. Of the total 60 units, at least 21 must be chosen from courses numbered 300 or above.

#### *First and Second Year Visual Arts Courses*

|              |    |
|--------------|----|
| 100*         | 1½ |
| 101*         | 1½ |
| 150          | 1½ |
| 3 of 110-140 | 4½ |
| 3 of 200-240 | 4½ |

\*Mandatory courses in first year

#### *First and Second Year Out of Department Electives*

|                    |    |
|--------------------|----|
| History in Art **  | 3  |
| Other electives    | 12 |
| Art or electives □ | 1½ |

\*\* The required 6 units of History in Art may be elected at any time during the 4 years, however students are strongly advised to complete 3 of those 6 units in their first or second year.

(Note: Students will not be admitted into third and fourth year studio courses until their out of department elective requirements for first and second year have been met.)

#### *Third and Fourth Year Visual Arts Courses*

|         |    |
|---------|----|
| 300-490 | 15 |
|---------|----|

#### *Third and Fourth Year Out of Department Electives*

|                  |   |
|------------------|---|
| Electives □      | 9 |
| Art or electives | 6 |

(Note: electives must include History in Art requirement.)

□ Of the total 60 units, at least 21 units must be chosen from courses numbered 300 or above.

\*\*\* A general University of Victoria regulation requires all students either to pass the qualifying examination in English or to complete certain English courses (see page 15).

Note 1: 390 and 490 may not be taken concurrently.

Note 2: Neither 390 nor 490 may be taken concurrently with 499.

## COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

Normally 100 level courses are offered in the first term followed by 200 level courses in the second term.

### **ART 100 (1½ formerly 3) STUDIO FOUNDATION**

A course focusing on the processes and ideas associated with contemporary art. Students will explore a range of studio practices and theoretical issues. (Priority is given to students registered in the B.F.A. program in Visual Arts. Class size is limited to 17) F(0-3)

### **ART 101 (formerly half of 200) (1½) DRAWING**

An introduction to concerns and methods in contemporary drawing. Students will gain experience in a range of studio practices as well as theoretical issues, through projects and critiques. (Pre- or corequisite: 100) (Class size limited to 17) F(0-3)

### **ART 110 (formerly half of 210) (1½) PAINTING**

A studio introduction to painting and related areas. (Pre- or corequisites: 100 and 101) (Class size is limited to 17) F(0-3)

### **ART 120 (formerly half of 220) (1½) SCULPTURE**

An introduction to concerns and methods in contemporary sculpture. Students will experience a broad range of studio practices as well as explore theoretical issues. Short projects and critiques are the standard format for this class. (Pre- or corequisites: 100 and 101) (Class size is limited to 15) F(0-3)

### **ART 130 (1½) PRINTMAKING**

An introductory course in relief printmaking techniques which will include linocut and woodcut and prepare the student for more advanced courses in intaglio, lithography and screenprinting. (Pre- or corequisites: 100 and 101) (Class size is limited to 17) NO(0-3)

### **ART 140 (formerly half of 240) (1½) PHOTOGRAPHY**

This course concerns the distinctive quality of the photograph. Basic darkroom procedures and camera techniques are dealt with in this context. (Students must supply their own camera) (Pre- or corequisites: 100 and 101) (Class size is limited to 17) F(0-3)

### **\*ART 150 (1½) INTRODUCTION TO CONTEMPORARY ART THEORY: PRACTICE AND CRITICISM**

A lecture course introducing the terms and concepts necessary for an understanding of contemporary art. (Class size is limited) S(3-0)



**ART 151 (1½) AN INTRODUCTION TO CONTEMPORARY VISUAL ART**

A lecture course open to all students. The course will consist of lectures by faculty members of the Department of Visual Arts on their art work and the issues pertinent to it. The course instructor will further expand on the individual lectures by discussing other examples of contemporary art that are related and will provide a critical context in which to approach current art practices. F(3-0)

**ART 200 (1½ formerly 3) DRAWING**

A continuation of ART 101. Students will move towards a more independent way of working. (Prerequisites: 100 and 101) (Class size limited to 17) S(0-3)

**ART 210 (1½ formerly 3) PAINTING**

An extension of 110. (Prerequisites: 100, 101 and 110) (Class size is limited to 17) S(0-3)

**ART 220 (1½ formerly 3) SCULPTURE**

A continuation of 120. Students will develop an ability to work independently in the sculpture area by the completion of this course. (Prerequisites: 100, 101 and 120) (Class size is limited to 15) S(0-3)

**ART 231 (1½) (formerly half of 331) SCREENPRINTING (Silkscreen)**

An introduction to screen printing; exploration of all stencil methods, including photo screen, with the aim of producing original prints. (Prerequisites: 100, 101 and 130) (N.B. May be taken concurrently with 232 or 233 but not both) (Class size is limited to 17) S(0-3)

**ART 232 (1½, formerly 3) INTAGLIO**

An introduction to the various intaglio processes including etching, drypoint and engraving. (Prerequisites: 100, 101 and 130) (N.B. May be taken concurrently with 231 or 233 but not both) (Class size is limited to 17) S(0-3)

**ART 233 (1½ formerly 3) LITHOGRAPHY**

An introduction to stone and metal plate lithography. (Prerequisites: 100, 101 and 130) (N.B. May be taken concurrently with 231 or 232 but not both) (Class size is limited to 17) S(0-3)

**ART 240 (1½ formerly 3) PHOTOGRAPHY**

A continuation of 140, including both practical and theoretical aspects of photography. (Students must supply their own camera.) (Prerequisites: 100, 101 and 140) (Class size is limited to 17) NO(0-3)

**Before admission to any 300 level art course, Visual Arts students should have completed a minimum of 9 units of out of department electives and their program requirements of 100 and 200 level art courses.**

**ART 300 (3) DRAWING****ART 301 (3) DRAWING****ART 302 (3) DRAWING**

Advanced courses in Drawing. (Concurrent registration in two permitted) (Prerequisites: 100, 101 and 200) (Class size limited to 15) Y(0-3)

**ART 311 (3) PAINTING****ART 312 (3) PAINTING****ART 313 (3) PAINTING**

Advanced courses in painting. (It is not necessary that these courses be taken in sequence. Concurrent registration in two of these courses is permitted.) (Prerequisites: 110 and 210) (Class size is limited to 15) Y(0-3)

**ART 321 (3) SCULPTURE**

Y(0-3)

**ART 322 (3) SCULPTURE**

Y(0-3)

**ART 323 (3) SCULPTURE**

Y

Advanced courses in sculpture. (It is not necessary that these courses be taken in sequence. Concurrent registration in two of these courses is permitted.) (Prerequisites: 120 and 220) (Class size is limited to 15)

**ART 332 (3) INTAGLIO**

An advanced studio course in the various intaglio methods with emphasis on developing the student's personal imagery. (May be taken concurrently with 333 and/or 334) (Prerequisites: 130 and one of 231, 232, or 233) (Class size is limited to 15) Y(0-3)

**ART 333 (3) LITHOGRAPHY**

An advanced studio course which will focus on colour and plate lithography and place more emphasis on the student's personal imagery. (Prerequisites: 130 and 233) (Class size is limited to 15) NO(0-3)

**ART 334 (3) MULTI-MEDIA PRINTMAKING**

A studio course placing emphasis on the use of a variety of media in printmaking. (May be taken concurrently with Art 332 and/or Art 333) (Prerequisites: Art 130 and one of 231, 232, or 233) (Class size is limited to 15) Y

**ART 341 (3) PHOTOGRAPHY**

Y

**ART 342 (3) PHOTOGRAPHY**

Y

**ART 343 (3) PHOTOGRAPHY**

An extension of 240. More advanced techniques and an emphasis on developing individual concerns. (Students in these classes must have their own camera.) (It is not necessary that these courses be taken in sequence. Concurrent registration in both is permitted.) (Prerequisites: 140 and 240) (Class size is limited to 15) Y(3-0)

**\*ART 350 (3) CONTEMPORARY ART THEORY AND PRACTICE**

This course introduces the student to the contexts — social, political, economic, intellectual — in which the artist operates today. This course does not deal with the history of contemporary art. (Prerequisite: 150 or permission of the Department) (Note: This lecture course is not considered a studio prerequisite for entry into other department courses) (Class size is limited) K(3-0)

**ART 351 (3) SPECIAL STUDIES**

This studio course will involve a study of a specialized topic or area and its relationship to practice. (Prerequisite: minimum of 9 units in 100 and 200 level courses) (Note: Normally only offered in summer studies and/or intersession) (Note: This course can be taken for credit more than once under different topics) (Class size is limited) K

**ART 480 (6) ADVANCED STUDIO**

An advanced course designed for Major students in their graduating year from all discipline areas of the Department. Students will be expected to propose a program of studio work in one or more disciplines and will proceed under the supervision of a course director and faculty adviser. (Prerequisite: 6 units of 300 level studio courses) (Class size limited) Y

**ART 490 (3) DIRECTED STUDIES**

(Prerequisite: 6 units of credit in the specialized area of study, at least 3 units of which must be at the third year level, and permission of the department. Normally for Major students only.)

Note: It is the expectation that, as well as the weekly conference time with your adviser, you will spend a minimum of 3 hours per week in the studio.

Note: Students may not take a 3rd year course and a directed studies with the same instructor in the same discipline in the same year. Y

**ART 499 (12) SENIOR PROJECT**

The senior project is the major component in the B.F.A. Honours Degree Program. Each student taking 499 works under the supervision of a faculty member. In addition to this regular contact there are two formal critiques of each student's work per semester at which three faculty members must be present. There is also a weekly 1½ hour Seminar requirement which is mandatory for all students undertaking this Senior Project. To qualify for the Honours Program a student must have a 1st class average in three 300 level studio courses. As class size is limited, students seeking entry will be asked to submit their work to the department where it will be reviewed in a competitive context. No more than 6 units of other course work may be taken with ART 499. Note: it is the expectation that, as well as the weekly conference time with the adviser the student will spend a minimum of 24 hours per week in the studio. The year culminates in the 499 Graduating Exhibition which is held in April of each year and is the final accomplishment of students in the Honours Program. The senior project presents an opportunity to students who have a firm commitment to their chosen area of study and the ability to work independently under supervision. Normally class size is limited to 15. Y

\* Approved for elective credit in the Faculty of Arts and Science.



## DEPARTMENT OF WRITING

### ADMISSION TO SPECIFIC COURSES

Although the programs offered by the Writing Department are intended, in the main to serve those students who have shown some ability as writers, a number of lecture courses are also included which may be of interest and value to all students.

**Only students majoring in Writing or those whose declared 'first area of study' is Writing will be allowed to register during early registration. All others must wait until September.**

#### Second, Third and Fourth year workshops:

Students may not register for a Writing workshop unless they have a grade of B- or higher in the appropriate prerequisite. Students in the Professional Writing Minor Program require a grade of B or higher in the appropriate prerequisite to advance.

No student will be permitted to take more than 6 units of workshops (poetry, fiction, nonfiction, drama) in any given year or more than 3 units in any given term. Special and Directed Studies courses are designed for those teaching situations which cannot be covered in regular workshops. No writing projects which might be covered in a regular workshop will be permitted within such special courses.

Subject to the regulations relating to prerequisites, courses in the Writing Program are open to any student who satisfies the Department as to ability, regardless of the faculty in which the student is registered. Preference, however, will be given to students majoring in Writing and those whose 'first area of study' is Writing.

### THE HARVEY SOUTHAM DIPLOMA IN WRITING AND EDITING

- 1) This is a 15 unit post-graduate Diploma for students with degrees (primarily in the Humanities and Social Sciences) who are looking for a professional credential that will lead to a career in writing and editing in journalism, publishing, government communication, and corporate information services.
- 2) Qualified students should complete their course work in one year (Winter and Spring terms), followed by two work terms and a thesis. Students admitted to the program must gain admittance to the Writing Cooperative Education Program for the Diploma and are subject to the requirements of the Cooperative Education Programs. A minimum of fifteen units of course work and two successful work terms is required to complete the program.
- 3) Admission to the program is by degree GPA, portfolio, referee reports and interview. Portfolios must be received in the Department by March 31st of the year in which the student expects September entry. For further details on these admission requirements, please contact the Department of Writing.
- 4) Courses (15 units)
  - a) 215, 216 — required before 306A, 315, 316
  - b) 404A, 315, 316 — required before work terms
  - c) 3 units of 495 — required before completion
  - d) 4.5 units from 306A, 306B, 317, 330, 415, 416, 430 or repeats of 315 or 316, or electives by permission.

### MINOR IN PROFESSIONAL WRITING (Not offered in 1995/96)

The Departments of English (Humanities) and Writing (Fine Arts) jointly offer a Minor in Professional Writing. Students may obtain a Minor in Professional Writing by completing the course requirements listed below in combination with a Majors or Honours Program. The goal of the Program is to provide students with the high level of skills required to succeed as professional writers in journalism, publishing, business, industry and government.

#### 1. Applicants for First Year Entry into the Program

Students must apply to the Admissions Office for acceptance to the University. Entrance to ENGL 181, WRIT 103, ENGL 182 or WRIT 104 will normally be restricted. Students taking ENGL 099 may not take the courses. In normal circumstances, ENGL 181 or WRIT 103 and ENGL 182 or WRIT 104 are prerequisites to all other Professional Writing Courses.

Lawrence W. Russell, B.A. (U. of Vic.), M.A. (Calif.), Professor and Chair of the Department

W. David Godfrey, B.C. (Iowa), M.A. (Stan.), Ph.D. (Iowa), Professor

Jack Hodgins, B.Ed. (Brit. Col.), Professor

William D. Valgardson, B.A., B.Ed. (Man.), M.F.A. (Iowa), Professor

Derk Wynand, B.A., M.A. (Brit. Col.), Professor

Lorna Crozier, B.A. (Sask.), M.A. (Alta.), Associate Professor

Margaret Hollingsworth, B.A. (Lake.), M.F.A. (Brit. Col.), Associate Professor

Donald F. Bailey, B.A. (New Br.), M.Ed. (Brit.Col.), Cooperative Education Coordinator

**Visiting, Adjunct and Cross-listed Appointments:**

Cameron Young, B.A. (McG.), M.Ed. (Tor.), Visiting Lecturer (1994-95)

Foreign writers who have recently taught for the department have included John McGahern (Ireland), Heidi von Born (Sweden), Rod Jones (Australia) and Sujata Bhatt (India/Germany).

The Department of Writing offers the following program options:

1. Major (drama, fiction, poetry, journalism, nonfiction, publishing) (also WRIT/THEA option)
2. Diploma (post-graduate Co-op program in journalism and publishing)
3. Professional Writing Minor (interdisciplinary, with English Dept.)
4. Film Studies Minor (interdisciplinary, various Departments) (see description on page 225)

### MAJOR PROGRAM

Students will be required to take 6 units of 200 level Writing, 15 units of 300/400 level Writing, including 4.5 units of workshops in a single genre.

All students are advised to work toward a double major, since failure to achieve at least a B- in a workshop will normally lead to their being unable to complete a degree in Writing. Without a concentration of courses in a separate discipline, this may lead to a delay in graduating.

If at least 9 units of electives are chosen from courses offered by other Departments within the Faculty of Fine Arts, the degree awarded may be either the B.F.A. or the B.A. of the Faculty of Fine Arts. If fewer than nine units of electives from the Faculty of Fine Arts are chosen, then the degree awarded will be the B.A. of the Faculty of Fine Arts.

#### Interfaculty Double Major

A Fine Arts student majoring in Writing may concurrently satisfy the requirements for the Major program of a Department in the Faculty of Arts and Science. Conversely, a student pursuing a Major program for the B.A. degree within the Faculty of Arts and Science may concurrently satisfy the requirements for the Major program of the Department of Writing as approved for the Faculty of Fine Arts. Only one B.A. degree with a Double Major will be awarded on the recommendation of the Faculty in which the student is registered.

### ADMISSION REQUIREMENTS AND ADVICE FOR STUDENTS ENTERING THE DEPARTMENT FOR THE FIRST TIME

1. Entrance to first year will normally be restricted  
Students taking ENGL 099 may not take the courses.

2. Applicants from other Universities and Colleges

Transfer students may be given permission to enter courses at the appropriate level provided they satisfy the department's standard by the submission of a portfolio of written work. Only portfolios received between January 15 and March 31 will be considered.

3. Applicants with Existing Degrees

Each year, a limited number of students are permitted to enter the program to work towards a second degree, B.F.A. or B.A. A minimum of two years of further study is required. Applicants who cannot produce a manuscript of sufficient quality to allow them entry into a third year workshop may require three or four years to complete their program. (See page 23, A Second Bachelor's Degree.) Only portfolios received between January 15 and March 31 each year will be considered.



## 2. Applicants from Other Universities and Colleges

Students who satisfy the Program's standard either by the production of written work or the passing of courses in Professional Writing at other institutions may be given permission to enter the Professional Writing program at the appropriate level. Only portfolios received between January 15 and March 31 each year will be considered.

### Other Information

- Entry to third and fourth year courses will depend upon successful completion of the A level prerequisites listed below and declaration of a major or honours program.
- Students will be admitted to the Program by the Professional writing executive Committee which may ask for transcripts, portfolios of previous work, letters of reference, and a personal interview.
- While the Co-op option is not mandatory, priority for admission to some courses will be given to those taking or seeking to take the Co-op option.
- Students are required to take 6 units from the A level courses and 9 units from the B level courses listed below. In addition, students must pass an examination after completing the A level courses.

Courses taken for the Minor cannot be used to complete requirements for the Majors or Honours Program.

### Professional Writing Courses Offered by the Department of English

#### A Level Courses

ENGL 181 (WRIT 103) Introduction to Professional Writing 1  
ENGL 182 (WRIT 104) Introduction to Professional Writing 2

NB: These two courses satisfy the English Department's requirement for entry into 200-level Professional Writing courses. However, they do not satisfy the English Department's prerequisites for other 200-level and above courses; for those prerequisites, see page 79 of the calendar.

ENGL 216 Writing Nonfiction Prose  
ENGL 226 Writing for Business and Government  
ENGL 240 Scientific and Technical Writing

#### B Level Courses

ENGL 401 Hypertext  
ENGL 406 Advanced Topics in Professional Writing  
ENGL 412 On-Line Research Techniques  
ENGL 492 Directed Readings in Professional Writing

### Professional Writing Courses Offered by the Department of Writing

#### A Level Courses

WRIT 103 Introduction to Professional Writing I  
WRIT 104 Introduction to Professional Writing II

NB: These two courses satisfy the Writing Department's requirement for entry into 200-level Professional Writing Courses.

WRIT 215 Intermediate Journalism  
WRIT 216 Media Culture and Technology

#### B Level Courses

WRIT 306A Publishing Procedures and Structure  
WRIT 306B Seminar in Electronic Publishing  
WRIT 315 Advanced Journalism Workshop  
WRIT 316 Nonfiction Workshop  
WRIT 317 Design and Production for Publishing  
WRIT 330 Reading in Canadian Media and Culture  
WRIT 404A Introduction to Photojournalism  
WRIT 404B Intermediate Photojournalism  
WRIT 404C Advanced Topics in Photojournalism  
WRIT 404D Advanced Topics in Photojournalism  
WRIT 415 Seminar in Publishing Policy and Management  
WRIT 416 Advanced Nonfiction Workshop  
WRIT 430 Media Analysis

### WRITING/THEATRE OPTION

See THEA/WRIT option in Theatre Department section of this Calendar.

### WRITING CO-OPERATIVE EDUCATION PROGRAM

The Co-operative Education Programs in the Faculty of Fine Arts are described on page 227. Additional general regulations pertaining to

Co-operative Education Programs of the University of Victoria are found on page 38.

The Writing Co-operative Program offers paid employment to students who are working toward a career in journalism, publishing or communications. The Co-op is open to students who are:

- \* registering as Diploma students in the Harvey Southam Diploma in Writing and Editing (in which Co-op is mandatory), or
- \* undertaking the Professional Writing Minor, or
- \* Majoring in Writing

Students registered in the Harvey Southam Diploma in Writing and Editing must satisfactorily complete all academic requirements of the Diploma (except the thesis) with at least a B+ in 215 and 216 prior to their first work term. Diploma students are required to satisfactorily complete two work terms.

Students undertaking the Professional Writing Minor as an adjunct to another undergraduate major, must follow the guidelines specific to their Major and the Professional Writing Minor.

Students with a Major in Writing or the Professional Writing Minor must satisfy the requirements for the Co-op prerequisite courses listed below:

- \* 101 or 103 and 104 and 404A
- \* 6 units from ENGL 115, 116, POLI 100, HIST 130
- \* 6 units from 200-231 (including 205 or 206 or 215 and 216)

Majors and Professional Writing Minors are encouraged to apply for preliminary admission to the Co-op at the end of their first year. In their second year they must be interviewed and approved by the Co-op Committee to finalize the program's admissions.

Before the first work term, students must have completed 205 or 206 or 215 and 216 with a grade of B+ or higher in one of these courses. Students are required to maintain a B average and to complete satisfactorily four work terms.

The work terms are arranged by the Department of Writing and are designed to combine practical work experience with the theoretical content of course study, with evaluation by both the employer and a faculty supervisor.

Except for Diploma students, students in the Co-op may withdraw from the program at any time in order to graduate in a regular program.

Students in Co-operative Education must carry a full course load during each study term.

Students are advised that a Co-operative Education fee will be charged.

Further information concerning the Writing Co-operative Education program may be obtained from the Co-op Coordinator.

### COURSES

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

Students are cautioned to read the statements included in "Limitations of Enrollment" on page 8 of this Calendar.

#### FIRST YEAR

#### \*WRIT 100 (formerly C W 100) (3) INTRODUCTION TO WRITING

This course consists of weekly lectures that will present a nonhistorical survey of some of the basic structures in poetry, drama and fiction and will involve the students in the writing and criticism of compositions in all three genres. (Prerequisite: Satisfactory standing in the Language Proficiency Index or successful completion of ENGL 099) Texts: To be announced. (Class limit 35 students) Y(3-0)

#### WRIT 101 (formerly C W 101) (3) BASICS OF PRACTICAL WRITING

This lecture/lab will instruct students in the fundamentals of logic, grammar and punctuation, style, copyright and libel law, and computing skills for writers, such as word-processing and typesetting. (Enrollment is limited to first or second year standing.) (Students are reminded that this is a prerequisite course for the Writing Cooperative Education Program) (Class limit 32 students) (Not open to students with credit in 103 or 104) Y(3-1)

#### WRIT 103 (ENGL 181) (1½) INTRO TO PROFESSIONAL WRITING I

This lecture/lab will introduce students to the basic skills of Professional Writing. (3-1)



**WRIT 104 (ENGL 182) (1½) INTRO TO PROFESSIONAL WRITING II**  
Further studies in the basics of Professional Writing. (3-1)

## SECOND YEAR

**\*WRIT 200 (formerly C W 200) (3) THE THEORY AND PRACTICE OF LITERARY CREATION**

This is a lecture course surveying the nature of the creative process and considering the many theories about it. Y(3-0)

**\*WRIT 201 (formerly C W 201) (3) POETRY WORKSHOP**

A workshop seminar in which the students are instructed and guided in the writing of poetry. (*Prerequisites*: 100 with an overall average of B- or higher, and a grade of B- in poetry) (Class limit 15 students) Y(0-3)

**\*WRIT 202 (formerly C W 202) (3) FICTION WORKSHOP**

A workshop seminar in which the students are instructed and guided in the writing of fiction. (*Prerequisites*: 100 with an overall average of B- or higher, and a grade of B- in fiction) (Class limit 15 students) Y(0-3)

**\*WRIT 203 (formerly C W 203) (3) DRAMA WORKSHOP**

A workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film, and television. (*Prerequisites*: 100 with an overall average of B- or higher, and a grade of B- in drama) (Class limit 15 students) Y(0-3)

**WRIT 205 (formerly C W 205) (3) INTRODUCTION TO JOURNALISM**

This course deals with the methods of gathering news stories and of organizing the material for writing. The writing portion of the course covers the principles of the major varieties of newspaper and magazine writing including text processing. The mechanical and editorial aspects of newspaper production as they relate to the handling of news copy, and a historical, political and economic introduction to Canadian newspapers, magazines, journals, and owners, will be covered through lectures. (Not open to students with credit in 215) (*Prerequisites*: Either 101, or both 103 and 104, with a grade of B- or higher. *Corequisite*: One of 200, 201, 202, 203, 206) (Class limit 20 students) Y(3-1)

**WRIT 206 (formerly C W 206) (3) PUBLISHING PROCEDURES AND PRACTICES**

This lecture course, with computer based labs, will instruct students in fundamental editorial skills which will be of use in newspaper, magazine, book or electronic publishing. Topics covered will include: language skills, style manuals, text processing, editorial roles in the publishing process, history of printing, publishing infrastructure organizations, principles of layout, distribution, costing and contract law. (Not open to students with credit in 216, or 306 from 1985-86 or earlier) (*Prerequisites*: Either 101, or both 103 and 104, with a grade of B- or higher. *Corequisite*: One of 200, 201, 202, 203, 205) (Class limit 20 students) Y(2-1)

**WRIT 215 (1½) INTERMEDIATE JOURNALISM**

The writing portion of the course covers the principles of the major varieties of newspaper and magazine writing. Aspects of newspaper production and a historical, political and economic introduction to Canadian newspapers, magazines, journals, and owners, will be covered through lectures. (Not open to students with credit in 205) (*Prerequisites*: Either 101, or both 103 and 104, with a grade of B- or higher. Minor students require a grade of B in 103 and 104. *Corequisite*: One of 200, 201, 202, 203, 206 or 230 and 231) (Preference will be given to Diploma and Minor students) (Class limit 20 students) FS(3-1)

**WRIT 216 (1½) MEDIA CULTURE AND TECHNOLOGY**

This lecture course will instruct students in editorial skills which will be of use in publishing. Topics covered will include: language skills, style manuals, text processing, editorial roles in the publishing process, history of printing, publishing infrastructure organizations, principles of layout, distribution, costing and contract law. (Not open to students with credit in 206, or 306 from 1985-86 or earlier) (*Prerequisites*: Either 101, or both 103 and 104, with a grade of B- or higher. Minor students require a grade of B in 103 and 104. *Corequisite*: One of 200, 201, 202, 203, 205 or 230 and 231) (Preference will be given to Diploma and Minor students) (Class limit 20 students) FS(2-1)

**WRIT 230 (1½) WRITING A SENSE OF PLACE**

A lecture course offering an introduction to writers who have made B.C. a strong element in one or more works. Will include poetry, fiction,

drama and prose by writers such as Fred Wah, Audrey Thomas, Pat Lane, Dorothy Livesay, Earle Birney, Emily Carr.

**WRIT 231 (1½) TECHNIQUES OF NONFICTION**

A lecture course offering an introduction to writers who have demonstrated mastery of the forms and techniques of non-fiction. (*Prerequisite*: 230 or second year standing)

## THIRD YEAR

**\*WRIT 303 (formerly C W 303A/B) (1½) POETRY WORKSHOP**

(*Prerequisite*: 201 with a grade of B- or higher, or equivalent) (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) FS(0-3)

**\*WRIT 304 (formerly C W 304A/B) (1½) FICTION WORKSHOP**

(*Prerequisite*: 202 with a grade of B- or higher, or equivalent) (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) FS(0-3)

**\*WRIT 305 (formerly C W 305A/B) (1½) DRAMA WORKSHOP**

A Workshop seminar in which the students are instructed and guided in the writing of drama for stage, radio, film and television. (*Prerequisite*: 203 with a grade of B- or higher, or equivalent) (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) FS(0-3)

**WRIT 306A (formerly C W 306A) (1½) PUBLISHING PROCEDURES AND STRUCTURES**

An overview of book and magazine publishing. This course is designed to give students an overview of book publishing in Canada (and the U.S. and Britain). Students will design their own publishing projects, examine existing publishing houses, and share written reports on the many aspects of book publishing. (*Prerequisites*: 206 or 216) F(0-3)

**WRIT 306B (formerly C W 306B) (1½) SEMINAR IN ELECTRONIC PUBLISHING**

This seminar will deal with the practice and theory of electronic publishing and editing in the 1990's, including: HTML, WWW, databases, font design, networks and on line training. (*Prerequisite*: 206 or 216) (Class limit 15 students) S(2-1)

**\*WRIT 307 (formerly C W 307) (1½) BASIC FORMS AND TECHNIQUES IN POETRY**

A lecture course surveying the functions of specific poetic techniques in a representative group of poems. Aspects of poetics discussed will include prosody, sound patterns, diction and figurative language. (*Prerequisite*: Second year standing) NO(3-0)

**\*WRIT 308 (formerly C W 308) (1½) ADVANCED FORMS AND TECHNIQUES IN POETRY**

A lecture course surveying formal structures in poetry in a representative group of poems. Topics discussed include poetic closure, the sonnet, sestina, villanelle and ghazal, and the influence of early twentieth-century poetic movements such as imagism on contemporary poetic forms. (*Prerequisite*: Second year standing) NO(3-0)

**\*WRIT 309 (formerly C W 309) (1½) BASIC FORMS AND TECHNIQUES IN SHORT FICTION**

A lecture course surveying the structural composition and the function of technique in a representative group of narrative prose works. Aspects of narrative discussed will include: theme, point of view, dialogue, scenic structure, role of narrator, metaphor, diction, plot and dialogue. (*Prerequisite*: Second year standing) F(3-0)

**\*WRIT 310 (formerly C W 310) (1½) BASIC FORMS AND TECHNIQUES IN THE NOVEL**

A lecture course surveying the structural composition and the function of techniques in a representative group of novels and novellas. Emphasis will be placed upon form and voice, as well as upon their relationship with such other elements of narrative as plot, character development, scene development and theme. (*Prerequisite*: Second year standing) S(3-0)

**\*WRIT 311 (formerly C W 311) (1½) STRUCTURE IN STAGE DRAMA**

A lecture course surveying the structural characteristics of stage drama. (*Prerequisite*: Second year standing) NO(3-0)



**\*WRIT 312 (formerly C W 312) (1½) STRUCTURE IN CINEMA AND TELEVISION DRAMA**

A lecture course surveying the structural characteristics of screen drama, making use of published film and television plays, and of actual films. (Prerequisite: Second year standing) NO(3-0)

**\*WRIT 313 (formerly C W 313) (1½) RECURRENT THEMES IN LITERATURE**

A lecture course surveying recurrent themes in English Literature and in other literatures in translation. (This course may be taken for credit more than once in different topics with permission of the Department.) (Prerequisite: Second year standing) NO(3-0)

**\*WRIT 314 (formerly C W 314) (1½) CHANGING PERSPECTIVES IN LITERATURE**

A lecture course surveying the different ways in which writers have tackled similar subject matter, taking its material from English literature and other literature in translation. (Prerequisite: Second year standing) S(3-0)

**WRIT 315 (formerly C W 315) (1½) ADVANCED JOURNALISM WORKSHOP**

Advanced techniques of editorial and feature article writing. (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) (Prerequisite: 205 or 215 with a grade of B- or higher) FS(0-3)

**WRIT 316 (formerly C W 316) (1½) NONFICTION WORKSHOP: I**

A workshop seminar in which the students are instructed and guided in the writing of major nonfiction forms, such as biography, travel, history, social analysis. (Prerequisites: 6 units of 200 level WRIT, including 205 or 206, or 215 and 216, or any 200 level workshop, with a grade of B- or higher) (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) FS(0-3)

**WRIT 317 (formerly C W 317) (1½) DESIGN AND PRODUCTION FOR PUBLISHING**

Students will be familiarized with typesetting (mechanistic and electronic), design, layout, and binding. Photography and preparation of material for four colour work will also be dealt with. Texts cover historical and contemporary aspects of print. (Prerequisite: either 101, or both 103 and 104; third year standing) (Preference will be given to Diploma students) (Class limit 15) FS(2-1)

**\*WRIT 318 (formerly C W 318A/B) (1½) MULTIMEDIA**

A lecture/seminar on the artistic uses of various media: radio, film and television. (Not open to students with credit for 212) (Prerequisite: Second year standing) (May be repeated one time provided a grade of B- or higher is maintained) NO(3-0)

**WRIT 320 (formerly C W 320) (1½) FILM WRITING AND PRODUCTION WORKSHOP**

A workshop in the fundamentals of scene scripting for film and in the basic techniques involved in film production. (Prerequisites: one of 201, 202, or 203 with a grade of B+ or higher and permission of the instructor) (May be repeated for 1½ units) (Class limit 15 students) FS(3-0)

**WRIT 330 (1½) READING IN CANADIAN MEDIA AND CULTURE**

A lecture course offering an introduction to major figures in Canadian Journalism and Publishing and Canadian theoreticians of communications, such as Innis, McLuhan, Crean and Nelson. (Prerequisite: Third year standing)

**\*WRIT 390 (formerly C W 390) (3) DIRECTED STUDIES IN WRITING**

Under the supervision of a full-time faculty member and with the approval of the Chair of the Department for work which can not be completed as part of a regular course. (Prerequisites: 9 units in Writing and permission of the instructor)

**\*WRIT 391 (formerly C W 391) (1½) DIRECTED STUDIES IN WRITING**

Under the supervision of a full-time faculty member and with the approval of the Chair of the Department for work which can not be completed as part of a regular course. (Prerequisites: 9 units in Writing and permission of the instructor)

**FOURTH YEAR****WRIT 400 (formerly C W 400) (1½) SPECIAL GENRES WORKSHOP**

A workshop seminar that will focus exclusively on a particular sub-genre, such as the prose poem, docudrama, dystopian fiction, lyric

novel, radio play. (Prerequisites: three units of 303, 304, 305, 316 with a grade of B or higher, and permission of the instructor) (May be repeated once if the instructor or the content is different) (Class limit 15 students) NO(0-3)

**\*WRIT 401 (formerly C W 401A/B) (1½) ADVANCED POETRY WORKSHOP**

(Prerequisites: 3 units of 303 with a grade of B- or higher, or equivalent) (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) FS(0-3)

**\*WRIT 402 (formerly C W 402A/B) (1½) ADVANCED FICTION WORKSHOP**

(Prerequisites: 3 units of 304 with a grade of B- or higher, or equivalent) (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) FS(0-3)

**\*WRIT 403 (formerly C W 403A/B) (1½) ADVANCED DRAMA WORKSHOP**

(Prerequisites: 3 units of 305 with a grade of B- or higher, or equivalent) (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) FS(0-3)

**WRIT 404A (formerly C W 404A) (1½) INTRODUCTION TO PHOTOJOURNALISM**

This course emphasizes basic aspects of black and white photography for publication and surveys the history of photojournalism. Camera handling, exposure, lighting, film developing and printing will be covered. (Students will require a 35mm camera with light meter and approximately \$45 for materials. Darkroom facilities are provided by the department.) (Prerequisite: Either 101 or both 103 and 104. Corequisites: 3 units from 205, 206, 215, 216) (Preference will be given to Co-op students) (Class limit 16 students) FS(0-3)

**\*WRIT 404B (formerly C W 404B) (1½) INTERMEDIATE PHOTOJOURNALISM**

Advanced camera and darkroom techniques are covered along with sequencing of photographs, and photography for publication. The work of major photojournalists is examined, emphasizing the development of individual style and personal statement. (Students will require a 35 mm camera with light meter and flash and they must spend about \$45 on film and printing paper. Darkroom facilities are provided by the department.) (Prerequisites: 404A and permission of the Department) (Preference will be given to WRIT Co-op students) (Class limit 16 students) NO(0-3)

**\*WRIT 404C (formerly C W 404C) (1½) ADVANCED TOPICS IN PHOTOJOURNALISM**

A workshop seminar which deals with further aspects of documentary photography including portraiture and studio lighting, large cameras and lenses. (Students must have a 35mm camera with light meter and flash and they must spend about \$50 on film and printing paper. Darkroom facilities are provided by the department.) (Prerequisites: 404B and permission of the Department) (Preference will be given to WRIT Co-op students.) NO(0-3)

**\*WRIT 404D (formerly C W 404D) (1½) ADVANCED TOPICS IN PHOTOJOURNALISM**

A workshop seminar in photography examining recent trends including the book length photo essay, personal statements and the increasing use of colour. (Students must have a 35 mm camera with light meter and flash and they must spend about \$50 on film and printing paper. Darkroom facilities are provided by the department.) (Prerequisites: 404C and permission of the Department) (Preference will be given to WRIT Co-op students) NO(0-3)

**\*WRIT 405 (formerly C W 405) (1½) INNOVATIONS IN 20TH CENTURY POETRY**

A lecture course surveying key works in 20th century poetry and discussing experimental writing. The material discussed will be taken from the literature of a number of countries. (Prerequisite: Third year standing) NO(3-0)

**\*WRIT 406 (formerly C W 406) (1½) INNOVATIONS IN 20TH CENTURY FICTION AND DRAMA**

A lecture course surveying key works in 20th century fiction and drama and discussing experimental writing. The material discussed will be taken from the literature of a number of countries. (Prerequisite: Third year standing) NO(3-0)



**\*WRIT 412 (1½) RECURRENT THEMES IN FILM**

A lecture/seminar on special topics such as "Film On Film" and others concerning the creative arts. (*Prerequisites:* Second year standing and permission of the Department) (May be repeated up to 6 units with the permission of the Department if the content is different) S(0-3)

**WRIT 415 (1½) SEMINAR IN PUBLISHING POLICY AND MANAGEMENT**

An introduction to the financial, structural, marketing, planning and management aspects of book and magazine publishing. Emphasis will be on the case study method, with due regard to the history of individuals, companies and organizations in Canada, and to the nature of publishing as a cultural industry. (*Prerequisite:* 205, 206 or 215 and 216) S(0-3)

**WRIT 416 (formerly C W 416) (1½) ADVANCED NONFICTION WORKSHOP**

A workshop seminar in which the students are instructed and guided in the writing of major nonfiction forms, such as biography, travel, history, social analysis. (*Prerequisites:* 1½ units from 315 or 316 with a grade of B- or higher) (May be repeated one time provided a grade of B- or higher is maintained) (Class limit 15 students) FS(0-3)

**WRIT 430 (1½) MEDIA ANALYSIS**

A senior lecture course investigating the structures and biases of modern media, with an emphasis on Canadian media and on organizational and regulatory alternatives to the prevalence of oligopoly and cross-ownership in Canada and abroad. (*Prerequisite:* Third year standing)

**\*WRIT 490 (formerly C W 490) (3) DIRECTED STUDIES IN WRITING**

Under the supervision of a full-time faculty member and with the approval of the Chair of the Department for work which can not be completed as part of a regular course. (*Prerequisites:* 12 units in Writing and permission of the instructor)

**\*WRIT 491 (formerly C W 491) (1½) DIRECTED STUDIES IN WRITING**

Under the supervision of a full-time faculty member and with the approval of the Chair of the Department for work which can not be completed as part of a regular course. (*Prerequisites:* 12 units in Writing and permission of the instructor)

\* Approved for elective credit in the Faculty of Arts and Science

**WRIT 495 (3) SENIOR THESIS PROJECT**

The thesis project will be done under the guidance of an individual tutor. (For Diploma students only)

## CERTIFICATE PROGRAM IN NATIVE INDIAN CREATIVE WRITING

Jeannette C. Armstrong, B.F.A. (U. of Vic.), Adjunct Lecturer (1994-95)  
Beth Cuthand, B.A. (Sask.), M.F.A. (Ariz.), Adjunct Lecturer (1993-95)  
Donna K. Goodleaf, B.A. (Trent), M.A., Ed.D. (Mass.), Adjunct Lecturer (1993-95)  
Armand G. Ruffo, B.A. (York), B.A. (Ott.), M.A. (Windsor), Adjunct Lecturer (1993-95)  
Rosemarie Spahan, B.F.A. (U. of Vic.), Adjunct Lecturer (1993-94)  
Greg Young-Ing, B.A., M.A. (Car.), Adjunct Lecturer (1993-95)

In cooperation with the En'owkin International School of Writing in Penticton, B.C. (En'owkin Centre, 257 Brunswick St., Penticton, B.C. V2A 5P9), the Department offers a Certificate in Native Indian Creative Writing. The entrance requirements and curriculum for this program are identical to those at the University of Victoria, but **this Certificate is only available for students who complete these requirements at the En'owkin International School**. Writing courses at En'owkin will meet the same academic standards as at the University of Victoria but will emphasize Native writing and cultural content. Students will take 15 units of Writing and 9 units of electives for the total of 24 units required by the Certificate. Course work completed at the En'owkin Centre will be identified by the letter E following the course number; e.g. CW 150E, CW 200E, FA 300E.

Students will have to complete their secondary school graduation and must meet the stated entrance requirements of the Faculty of Fine Arts of the University of Victoria. Mature students will be counselled according to their specific needs.

The Certificate program is designed primarily for mature students of Native Indian ancestry who wish to develop specialized skills in creative writing in a Native People's context. Candidates must have sought and obtained admission to the University of Victoria. Students may complete the program on a part-time basis but must complete successfully at least 24 units of course work over a period of two to six years. Credit obtained within the Certificate Program in Native Indian Creative Writing may be transferable to a regular University of Victoria degree program. Such transferability of credit is, however, subject to the specific requirements of the degree program.

Students wishing further details about admission to the Certificate and course requirements should write directly to the Director, Certificate Program in Native Indian Creative Writing, En'owkin International School of Writing, 257 Brunswick St., Penticton, B.C. V2A 5P9. Students who subsequently wish to pursue a B.A. or B.F.A. in Creative Writing at the University of Victoria must fulfill the normal requirements for an undergraduate degree. It is strongly advised that any such students consult the chair of the Department of Writing as early as possible.

**Required Creative Writing Courses:**

|           |  |     |
|-----------|--|-----|
| CW 100(E) | Introduction to Creative Writing                       | 3.0 |
| CW 150(E) | Writing for Children from a First Nations' Perspective | 1.5 |
| CW 155(E) | Critical Process and World View                        | 1.5 |
| CW 156(E) | Critical Process, Symbolism and Oral Tradition         | 1.5 |
| CW 160(E) | First Nations' Non-Fiction                             | 1.5 |
| CW 200(E) | The Theory and Practice of Literary Criticism          | 3.0 |
| CW 201(E) | Poetry Workshop  | 3.0 |
| CW 202(E) | Fiction Workshop                                       | 3.0 |
| CW 203(E) | Drama Workshop   | 3.0 |
| CW 206(E) | Publishing Procedures and Practices                    | 3.0 |

**Elective Courses:**

|           |                              |     |
|-----------|------------------------------|-----|
| FA 290(E) | Fine Arts Studies Off-Campus | 3.0 |
| FA 300(E) | Interdisciplinary Seminar    | 3.0 |
| FA 390(E) | Fine Arts Studies Off-Campus | 3.0 |
| HA 382A   | Native North American Arts   | 1.5 |
| HA 382B   | Native North American Arts   | 1.5 |

**CW 150(E) (1½) WRITING FOR CHILDREN FROM A FIRST NATIONS' PERSPECTIVE**

This course will instruct students in the techniques used in writing for children. An examination of Native Indian legends and stories and the imagery contained therein as well as the importance of uniting illustrations to story line will take place. Contemporary story writing, as well as traditional, will be emphasized.

**CW 155(E) (1½) CRITICAL PROCESS AND WORLD VIEW**

This course will examine how Native world-views are incorporated into poetry, prose, drama, and song, with the aim of encouraging students to be conscious of Native Indian world-views and their expression in their own creative work and that of other Native writers. Topics explored will include format, voice, style, theme, and subject.

**CW 156(E) (1½) CRITICAL PROCESS, SYMBOLISM AND ORAL TRADITION**

This course will focus on and encourage the use of archetypes in poetry, prose and drama. Native literature archetypes such as coyote, the Thunderbird, eagle, owl and horse will be discussed, and the nature of their use by Native authors will be examined. Students will examine the literary forms that have been developed by Indigenous peoples everywhere with a view to using some of these forms as models for their own creative efforts. Oratory, legends and stories, songs, music, dance, Native humor, metaphor, symbolism, rhythm, and the use of sign language will be studied.

**CW 160(E) (1½) FIRST NATIONS' NON-FICTION**

This course will examine First Nations' non-fiction writing such as essays, autobiographies, biography, and political oratory, both in the modern and in the historical context.



# FACULTY OF HUMAN AND SOCIAL DEVELOPMENT

James C. McDavid, B.A., M.A. (Alta.), M.A., Ph.D. (Indiana), Professor and Dean of the Faculty

Michael J. Prince, B.A. (Car.), M.P.A. (Queen's), Ph.D. (Exeter), Lansdowne Professor (Social Policy)

Brian Wharf, B.A., B.S.W., M.S.W. (Brit. Col.), Ph.D. (Brandeis), Professor

Marie L. Campbell, B.A., M.A. (Brit. Col.), Ph.D. (Tor.), Associate Professor

Katherine Teghtsoonian, B.A. (Brit. Col.), A.M., Ph.D. (Stan.), Assistant Professor

## Visiting, Adjunct and Cross-listed Appointments

Deborah Rutman, B.Sc., M.A., Ph.D. (Tor.), Adjunct Assistant Professor (1994-95)

Marilyn D. Walker, B.A. (Tor.), M.A. (Manit.), Ph.D. (York), Adjunct Assistant Professor (1994-96)

The Faculty of Human and Social Development comprises the Schools of Child and Youth Care, Health Information Science, Nursing, Public Administration and Social Work, and offers undergraduate programs leading to the degrees of Bachelor of Arts in Child and Youth Care, Bachelor of Science in Health Information Science, Bachelor of Science in Nursing, Bachelor of Social Work, and to the Diploma in Public Sector Management; a graduate program leading to the degree of Master of Public Administration; and a Multidisciplinary Master's Program in Policy and Practice in Health and Social Services leading to the degree of Master of Arts, for child and youth care students, Master of Arts or Master of Nursing for nursing students, or Master of Social Work for social work students.

All of the schools have developed a distinctive curriculum in response to the needs of their respective professions. However, some clients of the human services cannot be neatly classified by professional boundaries, and hence a major objective of the Faculty of Human and Social Development is to develop opportunities for students who will work together as professionals to learn together while in university. Such opportunities include courses covering common content, workshops and conferences. In addition faculty members in the Faculty of Human and Social Development are encouraged to undertake research projects on an interdisciplinary basis including collaboration with colleagues in other Faculties.

## Admission and Registration

See pages 9-13 inclusive of the Calendar. Probability and Statistics 12 is recommended for undergraduate admission to the Faculty of Human and Social Development. Mature students who do not have Mathematics to the Grade XI level are encouraged to take a refresher course prior to undertaking their studies. See additional requirements under each program.

## Application for Admission

Applicants for the professional schools in the Faculty of Human and Social Development are required to complete a separate application for the School of interest in addition to the application to the University.

## General Regulations

Calendar regulations governing registration, fees, and academic advancement (see pages 17-23) apply to all students registered in the Faculty of Human and Social Development. Special regulations are set out under the appropriate area.

## Guidelines for Professional Conduct

The Faculty of Human and Social Development expects students to develop and adhere to a professional code of conduct. The Faculty supports models for professional conduct based on the following guidelines:

1. Submission of oneself to a professional code of ethics;
2. The exercise of personal discipline, accountability and judgment;
3. Acceptance of personal responsibility for continued competency and learning;

4. A willingness to serve the public, client or patient and place them before oneself;
5. The ability to recognize the dignity and worth of all persons in any level of society;
6. A willingness to assist others in learning;
7. The ability to recognize one's own limitations;
8. The maintenance of confidentiality of information appropriate to the purposes and trust given when that information was acquired; and
9. Acceptance that one's professional abilities, personal integrity and the attitudes one demonstrates in relationships with other persons, is the measure of professional conduct.

**Unprofessional Conduct:** All students in the Faculty of Human and Social Development will be subject to the provisions of the codes of ethics of their respective professions, and may be required to withdraw from their school for violating these provisions. Students may also be required to withdraw from their school when ethical, medical or other reasons interfere with satisfactory practice in their respective disciplines.

## Regulations Concerning Practica

### General:

The Faculty reserves to its individual schools and programs, the right to approve any agency or institution that provides placements for student practica, and to change any placement assigned to a student. The student, however, has the right to be informed in writing of the reasons for any change in placement. While the Faculty accepts a responsibility to provide a sufficient number of practicum opportunities to serve the needs of all registered students, a student may be required to withdraw from a practicum course if none of the available practicum agencies will accept that particular student.

### Dates:

The dates of practica will be established by each school or program, and will be announced to the students involved at the beginning of each term.

### Attendance:

Attendance at practicum activities is required. Students are expected to notify the placement agency whenever practicum appointments cannot be kept, and also to inform the course instructor.

**Unprofessional Conduct in Practicum:** It is the responsibility of the course instructor to inform students of the criteria by which unprofessional conduct will be judged in the practicum setting.

### Denial and Withdrawal:

#### (a) Denial

Students will be denied the practicum experience if their preparatory work is considered unsatisfactory by the Director of the School in the Faculty of Human and Social Development.

#### (b) Temporary Withdrawal of Students Pending Report

Where, during the course of a term, there are reasonable grounds to believe that the conduct or lack of competence of a student enrolled in practicum has adversely affected or may adversely affect

(i) Clients or pupils,

(ii) Personnel including students associated with the practicum, the Director may require a student to withdraw temporarily from the practicum pending the receipt of a report on the conduct and lack of competence of the student.

#### (c) Withdrawal

After giving the student an opportunity to be heard, the Director may require a student to withdraw from the practicum where the Director is satisfied that the student's conduct or lack of competence may adversely affect members of any of the groups identified in (b) above.

#### (d) Voluntary Withdrawal

Students seeking voluntary withdrawal from a practicum, whether permanent or temporary, must receive permission to do so from their faculty supervisor in Human and Social Development.



**(e) Notification of Records Services**

Students who withdraw temporarily from a practicum must notify Records Services in writing. Students who are required to withdraw from a practicum will be withdrawn from any course involved by written notification from the Director to Records Services.

**Readmission:**

If students who have withdrawn from a practicum for whatever reason later wish to reenter the practicum they must apply for readmission to the course and should not assume that readmission is guaranteed.

**Appeals:**

The normal avenues of final appeal (see page 16) are available to students who have been required to withdraw from a practicum. Students in the Faculty of the Human and Social Development may follow regular appeal procedures within the Faculty.

**English Requirement**

All four year baccalaureate programs in the Faculty of Human and Social Development will normally include 3 units of English, chosen in consultation with the Department of English.

**Academic Advice**

Academic advice about the professional schools in the Faculty of Human and Social Development is available from faculty members of the appropriate school, on an appointment basis.

**Course Work at other Universities**

Students who plan to undertake upper level course work at another university must normally receive prior approval from the Dean and the Director of the School in which the student is registered if they wish such course work to be credited toward a degree program or diploma program in the Faculty of Human and Social Development. Upon successful completion of such course work it is the student's responsibility to request the Registrar of the other university to send an official transcript of record to the Records Office of the University of Victoria.

**Standing at Graduation**

For degrees granted in the Faculty of Human and Social Development, a graduating average of 7.00 is the lower limit for the degree notation "With Distinction."

**Cooperative Education Program**

Please refer to page 38 of the Calendar for a general description of Cooperative Education.

In the Faculty of Human and Social Development, a Cooperative Education program is offered by the School of Public Administration at the graduate level and by the School of Health Information Science at the undergraduate level.

Admission to and completion of Cooperative Education Programs are governed by individual departmental requirements. As a required part of the program, students are employed for specific work terms, each with a minimum duration of 13 weeks. This employment is related as closely as possible to the student's course of studies and individual interest.

Students may withdraw from the Cooperative Education Program at any time and remain enrolled in a degree program offered by the school.

Details of the program in the School of Public Administration are outlined on page 358 and on page 261 for Health Information Science.

**Advisory Committees**

Programs in the Faculty of Human and Social Development receive the benefit of advice and guidance from advisory committees whose members are drawn from professionals engaged in various private agencies or Government departments. Further information is available from each school or program.

**INTERDISCIPLINARY COURSES**

The following elective courses are open to all students undertaking degrees in the Faculty of Human and Social Development.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered this session)

**HSD 377 (1½) SELF AND OTHERS IV — GROUP PROCESS**

This course focuses on the theories and concepts of group process from a multidisciplinary perspective. Students will have the opportunity to

experience and critically reflect on group process. The examination of self in relation to group process will be an essential component of this course. (Prerequisite: Self and Others III) S(3-0)

**HSD 400 (1½) POLICY IN THE HUMAN SERVICES**

The objectives of this course are to provide an introduction to the main organizational structures of, and stages in, the social policy making process in Canada; to strengthen skills in the analysis of policies and programs in Canadian human services; to critically examine different ideologies and theories through which the welfare state has been examined in various countries and to develop an appreciation of the interdisciplinary nature of social policy as a field of academic and applied activity. (3-0)

**HSD 401 (1½) WOMEN IN THE HUMAN SERVICES**

The objective of this course is to analyze the social, economic and political forces which have shaped the status of women in the Human Services. This analysis will include an examination of women as consumers and women in management positions. An important aspect of the course will be a comparison of the status of women in different professions, particularly the traditional women's professions of nursing, social work and child and youth care. (3-0)

**HSD 402 (1½) INTRODUCTION TO INFORMATION TECHNOLOGY FOR PROFESSIONALS IN THE HUMAN AND SOCIAL SERVICES**

An introduction to the nature, organization and management of information and information technology, as these are encountered in the human and social services. No previous experience with computers is required. The use of computer hardware and software, with particular emphasis on operating systems, electronic communications, database management, spreadsheet applications, and computer graphics is discussed. Also addressed are the ethical and professional implications of changes in the nature and use of information and information technology in the human and social services. (Not open to students with credit for HINF 162 or 172) (2-2)

**HSD 404 (ADMN 311) (1½) THE POLITICAL AND GOVERNMENTAL ENVIRONMENT**

An exploration of the political and governmental institutions and processes within which public administrators and health and social service professionals work. Topics to be examined include political parties, pressure groups, public participation, the media, courts, the Charter of Rights, legislative bodies, the political executive, central agencies, ministries, departments, crown corporations, regulatory agencies, quasi-governmental service delivery agencies, and intergovernmental relations. The course is designed for public servants and health and social service professionals at all levels of government and administrators in quasi-governmental agencies. (Credit will not be given for both HSD 404 and ADMN 311) (3-0)

**HSD 425 (1½) QUALITATIVE AND QUANTITATIVE ANALYSIS**

This course provides students with a grounding in the techniques commonly used in the analysis of both quantitative and qualitative data. Students will engage in the process of qualitative analysis through examining qualitative data, data coding and thematic construction. A range of descriptive and inferential statistical approaches to quantitative analysis are examined using a computer-based system. (Normally, this course is available only to students registered in the Schools of Child and Youth Care, Nursing, and Social Work. All students must have access to a tape recorder and have basic computing and word processing skills prior to enrolling in the course. Students taking the course off-campus must have access to a computer) (Normally credit will not be given for both HSD 350 and HSD 425) FS(3-1)

**HSD 460 (1½) SPECIAL TOPICS IN HUMAN AND SOCIAL DEVELOPMENT**

This is a variable content course which will focus on current and emerging issues in the human services. Examples of appropriate content include the prevention and treatment of alcohol and drug abuse and cross cultural issues in the human services. (Restricted to students in the Faculty of Human and Social Development in the third or fourth year of study) (May be taken more than once for credit to a maximum of three credits) (Offered as resources permit) (3-0)



## SCHOOL OF CHILD AND YOUTH CARE

Valerie S. Kuehne, B.Sc.N. (Alta.), M.Ed. (Loyola), Ph.D. (Northw.), Associate Professor and Director of the School  
Gordon E. Barnes, B.Sc. (Man.), B.A. (Winn.), M.A., Ph.D. (York), Professor

Alan R. Pence, B.A., M.S. (Portland St.), Ph.D. (Ore.), Professor  
Frances A.S. Ricks, B.A. (Ore.), M.Sc. (Ind.), Ph.D. (York), Professor  
James P. Anglin, B.A. (Car.), M.S.W. (Brit. Col.), Associate Professor  
Roy V. Ferguson, B.A., Ph.D. (Alta.) Associate Professor  
Sibylle Artz, B.A., M.A. (U. of Vic.), Assistant Professor  
Philip H. Cook, Vordiplom. (Berlin Freie U.), M.A., Ph.D. (Queen's), Assistant Professor

Sandra Griffin, B.A., M.A. (U. of Vic.), Research Associate  
Robert Martin, B.S.W., M.P.A. (U. of Vic.), Continuing Studies Program Director

Colleen McConnell, B.A. (U. of Vic.), Continuing Studies Program Coordinator

Miriam Curtis, B.A. (U. of Vic.), M.Ed. (U. of Toronto), Practica Coordinator

Vicki Ziegler, B.A. (U. of Vic.), Admissions Coordinator

### Visiting and Adjunct Appointments

Greg Saunders, B.A., M.A. (U. of Vic.), Visiting Lecturer (1994-95)

## PROGRAM

The School of Child and Youth Care offers a program of academic study and field work practice leading to a B.A. in Child and Youth Care. The course of study provides graduates with both the academic breadth of a liberal arts degree and the specific professional education to enter a variety of child and youth care employment settings. These settings range from early intervention with special needs infants to youth correction programs, from community based programs, such as day care centres, schools, and group homes, to residential treatment facilities and hospital based settings. Graduates of the School of Child and Youth Care are most often, but not exclusively, employed to provide intensive and continuous therapeutic care to special needs children and youth (0-18 years). The breadth of the child and youth care field requires a primary curriculum focus on generic aspects of caregiving. These generic components include a focus on normative development and social competence as a context for therapeutic intervention.

### BACHELOR OF ARTS IN CHILD AND YOUTH CARE

The B.A. in Child and Youth Care is awarded following successful completion of 60 units of university recognized credit. On campus students enter the program upon completion of a minimum of 12 units of university credit or its recognized equivalent, e.g., transfer from a community college. (See Admission Procedures below.)

Some 200 level courses in Child and Youth Care may be taken by students not enrolled in the B.A. Program with the permission of the Director.

The B.A. program of study includes core and elective courses as outlined in the "basic program" section below. Within this program students have considerable freedom in course selection. Students with professional child and youth care experience who may be eligible to challenge non-practicum courses upon admission to the School of Child and Youth Care should consult with the Admission Coordinator prior to the beginning of the fall term. Practicum courses are not open to challenge; students are placed in practicum settings in accordance with their professional background and current learning needs. Students should give special attention to the Regulations Concerning Practica (see page 256).

### DISTANCE EDUCATION (Off Campus Students)

The B.A. degree in Child and Youth Care is available in cooperation with the Division of Continuing Studies for off campus students through courses delivered by distance education. The off campus format allows child and youth care practitioners to continue employment while pursuing their degree.

The School has been responsive to the child and youth care needs of specific cultural groups through the development of community-based,

culturally sensitive coursework. This coursework is available only through specific community partnerships; the School currently recognizes the successful completion of this coursework as part of degree completion through college partnership transfer agreements.

The School's introductory core (200 level) courses delivered by distance education may also be taken by students who do not intend to complete the degree program.

### Special Access Applicants in Child and Youth Care Continuing Studies Program:

The University of Victoria School of Child and Youth Care is interested in extending university level learning opportunities to residents of British Columbia, and other geographical regions who wish to do their courses by distance education and who may not qualify under the normal categories of admission.

Applicants who qualify in this category will be selected for consideration for admission on the basis of the following criteria:

- Persons who are at least 23 years of age (prior to the beginning of the session applied for)
- Persons whose academic achievements have been significantly delayed, interrupted, or adversely affected by:
  - cultural and/or economic disadvantages; or
  - family or similar responsibilities and the consequent need to attend to these responsibilities or maintain employment.

Those who qualify for consideration in the Special category will be selected by the Senate Committee on Administration, Reregistration and Transfer for admission on the basis of:

- their education history
- non-education achievements that indicate an ability to succeed at university.

### Documents Required:

Applicants in this category must submit two Special Access Reference forms (available from Admission Services) from persons specifically able to access the applicant's potential for academic success. References from relatives are not acceptable. Applicants must be able to document the nature and extent of their circumstances, and demonstrate the impact on their educational experience.

### ADMISSION PROCEDURES (On Campus Students)

Enrollment in the School of Child and Youth Care is limited. To be eligible to apply to the School a student must have completed a minimum of 12 units of university study or equivalent recognized transfer credit. Of these units, 3 units of university transfer introductory psychology (normally Psychology 100 or equivalent) and 3 units of university transfer introductory English are required. A minimum grade point average of 3.00 (UVic C+) in the immediately preceding 12 units of study is required. In addition, a grade of C+ or higher in Psychology and English is also required.

Students who have completed an approved human services program at an accredited, recognized college may be eligible to receive additional credit from the School. College level human service certificate programs of one full year's duration, completed with a 70% average or higher, may be eligible for a maximum of 15 non-specific CYC units. College level human service diploma programs of two full years' duration, completed with a 70% average or higher, may be eligible for a maximum of 30 non-specific CYC units. This credit may not necessarily be accepted by other programs at the University of Victoria.

Students are selected on the basis of personal and professional suitability as well as academic standing. An interview is normally required as part of the application process. Paid or volunteer experience with special needs children and/or youths is considered in the admission decision.

Applicants to the program who are transferring from other postsecondary institutions must submit to the Director of Admission Services by March 31: (1) an Application for Admission to the University, (2) a School of Child and Youth Care Application Form, (3) Letter of Intent outlining the applicant's past experience and career objectives, (4) two copies each of any pertinent academic transcripts and diplomas or certificates.



Applicants to the program who are transferring from another faculty within the University of Victoria must submit to the Director of Records Services by March 31: (1) a School of Child and Youth Care Application Form, (2) Letter of Intent outlining the applicant's past experience and career objectives.

It is strongly recommended that applicants for the program have a current first aid certificate.

After having completed one or more years in the School of Child and Youth Care, a student may apply to the School for a one year leave of absence. The student must consult the School of Child and Youth Care concerning possible problems as a result of the leave of absence. The student must have approval for the leave of absence in advance of taking leave.

## STANDING

Students whose sessional grade point average falls below 3.00 or who fail to receive a C+ grade or higher in any core Child and Youth Care or other required course may be required to withdraw from the program.

In the province of British Columbia, as well as a number of other Canadian provinces, a Criminal Records Check is a prepracticum and preemployment requirement of many agencies with clients who are classified as "vulnerable people" (e.g., children, the mentally and/or physically handicapped, etc.). Please be advised that a criminal record may limit practicum placement and employment opportunities in the field of Child and Youth Care.

## REQUIREMENTS

The following academic program is designed to provide professional education and specialized practical education and training within a basic liberal arts education. Upon admission to the School of Child and Youth Care (Second year), students are advised to consult with the Admissions Coordinator on course selection prior to course registration.

Core courses are normally restricted to students in Child and Youth Care and may be taken by students outside the School only with permission of the instructor.

### FIRST YEAR (Introductory year prior to admission to School of Child and Youth Care):

#### Required:

Three units of English in consultation with the English Department. (Students usually select from ENGL 115, 116, 121, 122)

Three units of introductory psychology (normally PSYC 100A/B or its equivalent)

#### Suggested Electives:

6-9 units of courses

Child and Youth Care 201 is strongly recommended for students considering entering the School of Child and Youth Care. For further suitable first or second year electives see examples listed under Second Year.

### SECOND YEAR:

#### Required:

CYC 200A, 200B, 201 and 252

Three units of child and adolescent and/or lifespan development. These are normally PSYC 335/336 or Education-D 305

#### Suggested Electives:

4½ units selected according to the student's interests and career goals. The following list is meant to serve as a guide to assist in the selection of courses. Consult the University Calendar for other options.

#### First and Second Year Electives

Examples of suitable First Year and Second Year general electives are:

#### Arts and Science

ANTH 100 or 200 level course

MICR 200

BIOC 201

BIOL 150A and 150B, or any 200 level course

CSC 100

ENGL — a 200 level course

HIST 205, 349

LING 100, 250, or 370

MATH 100 or 120

PHIL 100 or 269

POLI 100, 202

PSYC 250

SOCI 103

#### Education

AE 103

ED-D 300

ME — a 100 or 200 level course

PE — a 100 or 200 level course

#### Fine Arts

MUS 100 or 200

THEA 181 or other 100 or 200 level course

ART 100 or 200 level course

#### Human and Social Development

CYC 260, 290

SOCW 200B

All second year required courses must be completed prior to enrolling in third year required courses.

### THIRD YEAR:

#### Required:

CYC 301

CYC 310

CYC 338

#### Electives: 3 units

All third year required courses must be completed prior to enrolling in fourth year required courses.

### FOURTH YEAR:

#### Required:

CYC 410

CYC 423

HSD 425

CYC 465

CYC 466

CYC 474, or

CYC 475, or

CYC 476

(one of the 474, 475, 476 series is required)

#### Fourth Year Electives: 4½ units

#### Areas of Interest:

The School of Child and Youth Care normally offers elective courses, focused on areas of interest such as drug and alcohol abuse, cross-cultural care, child life, early childhood, ethics or death and dying.

Students can include in their program of electives all courses necessary for licensing as a Preschool Day Care Supervisor and a Special Needs Supervisor. Students interested should contact the Practica or Admissions Coordinator to ensure appropriate selection of courses.

The following is a list of courses which relate to the areas of interest mentioned above. This list is meant to serve as a guide for the selection of electives. It is not meant to be exclusive. Students are encouraged to review the full range of university offerings.

#### Arts and Science

ANTH 312, 322, 335, 336,

339A, 339B

PSYC 250, 311A, 311B, 312, 313,

315, 415, 430, 436, 450

PHIL 331

SOCI 301, 335, 445

#### Education

ED-B 316, 317, 331, 339, 341, 440, 441; ED-D 306, 405

406, 410, 411, 414, 415, 417, 433, 434

#### Human and Social Development

CYC 360, 390, 460, 490, 474, 475, 476

CYC (SOCW) 350A

HSD 400, 401, 402, 404, 460 (see p.235)

HINF 215A, 240



## PROGRAM DEVELOPMENT COMMITTEES

Through their participation in school activities, students in the School of Child and Youth Care have made, and are expected to continue to make significant contributions to program development and the field of child and youth care.

## COURSES

Normally CYC 201 and 350A are open to students from other Schools or Faculties.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### CYC 201 (1½) INTRODUCTION TO PROFESSIONAL CHILD AND YOUTH CARE

This course presents an overview of the child and youth care field. It is a required course for program students, however it is also available for nonprogram students. Content includes a survey of the history of the profession and the role of the child and youth care practitioner across a broad spectrum of settings. FS(3-0)

### CYC 200A (1½) THEORETICAL FOUNDATIONS IN CHILD AND YOUTH CARE

This course seeks to demonstrate how theory affects practice. Three theoretical approaches to behaviour change are introduced: behavioural, psychodynamic and systemic. These are grounded in multicultural, feminist and normative developmental perspectives. F(3-0)

### CYC 200B (1½) PROFESSIONAL FOUNDATIONS FOR CHILD AND YOUTH CARE

The foundations of Child and Youth Care professional practice are explored through an examination of the issues surrounding professional identity, ethical practice, and the interdisciplinary team approach. The skills required for professional communication and team work, both oral and written, are developed throughout the course. S(3-0)

### CYC 252 (formerly 352) (3) FUNDAMENTALS OF CHANGE IN CHILD AND YOUTH CARE PRACTICE

This course focuses on facilitating purposive change in the lives of children and youths involved in a broad spectrum of group care and community based settings. The use of communication skills and helping strategies, and the development of therapeutic relationships are explored in relation to the development of self and core elements of child and youth care practice. (Grading: INP (Distance Education only); letter grade) Y(3-0)

### CYC 260 (½, 1, 1½ or 3) SPECIAL TOPICS IN CHILD AND YOUTH CARE

This course provides an opportunity to examine selected current issues in child and youth care. (With approval of a faculty adviser, this course may be taken more than once for credit) F,S,K or Y(3-0)

### CYC 290 (½, 1, 1½ or 3) DIRECTED STUDIES IN CHILD AND YOUTH CARE

This course allows for research projects, additional course work or directed reading in a specified area and is intended primarily to assist students transferring from other institutions or programs. F,S,K or Y

### CYC 301 (3, formerly 4½) PROFESSIONAL CHILD AND YOUTH CARE: THEORY AND APPLICATIONS FOR PRACTICE

The objective of this course is for students to develop a personal style and orientation to their child and youth care practice. This is sought through an awareness of one's beliefs, values, ethics and life position, the analysis of theories from four main orientations (i.e., psychodynamic, behavioural, humanistic and systems) as well as the application of a model for case management. Y(3-0)

### CYC 310 (formerly 210A/B) (4½, formerly 3) SUPERVISED PRACTICUM

Students are required to work directly with children/youths in a supervised practice situation in order to promote professional skill acquisition and integration. Emphasis is placed on observation and recording skills, understanding the structure and functioning of a service agency, and fostering the student's awareness of his or her functioning in relation to children, youth and agency workers. Attention will also be given to developing beginning level case planning, intervention and case presentation skills with both a one to one and a group focus. Y(1-6)

### CYC 338 (3) APPLYING DEVELOPMENTAL THEORY IN CHILD AND YOUTH CARE PRACTICE

This course focuses on the clinical application of contemporary developmental theory in child and youth care practice. An emphasis is placed on current developmental research and its application to practice settings in families and communities. An ecological approach to understanding and working with children, youth, and their families is the underlying model for course structure and content. (Prerequisite: PSYC 333 A & B or equivalent) Y(3-0)

### CYC 350A (formerly 350) (SOCW 350A) (1½) LAW AND SOCIAL SERVICES

The objective is to provide students in Child and Youth Care and Social Work with an understanding of the Law as an expression of social policy, and of the processes by which laws are developed, enacted and changed; Family Law and the Family Courts, with special reference to laws affecting children; human rights as they apply to social services; the organization of legal services and the legal accountability and liabilities of social workers, child and youth care workers, and others in the social service field. (Prerequisite: Third year standing or permission of instructor) Y(3-0)

### CYC 360 (½, 1, 1½ or 3) SPECIAL TOPICS IN CHILD AND YOUTH CARE

This course provides an opportunity to examine selected current issues in child and youth care. (With approval of a faculty adviser, this course may be taken more than once for credit) F,S,K or Y(3-0)

### CYC 390 (½, 1, 1½ or 3) DIRECTED STUDIES IN CHILD AND YOUTH CARE

Research projects, directed readings, or additional course work in a specified area. (May be taken more than once for credit, provided the course content is different from that previously taken) F,S,K or Y

### CYC 410 (4½, formerly 3) ADVANCED SUPERVISED PRACTICUM

This supervised practicum focuses on the student's chosen professional area of interest and provides an opportunity to apply case planning, intervention and evaluation skills at an advanced level. Professional consultation, clinical functioning and the integration of theory and practice, are emphasized. Ten hours per week in the practicum setting and one hour per week in a seminar. (Restricted to Child and Youth Care students in their fourth year of study) (Prerequisites: 301, 252 and 310) Y(1-10)

### CYC 423 (1½) CHILD AND YOUTH CARE RESEARCH

This course introduces students to ways in which knowledge in the child and youth care field is developed and helps them to develop skills in the organization and analysis of research in the professional literature. Within a research practitioner context, students are presented with a range of research techniques and methods and then are guided in the development of a formal research proposal relating to issues in the field and areas of personal interest. (3-0)

### CYC 460 (½, 1, 1½ or 3) SPECIAL TOPICS IN CHILD AND YOUTH CARE

This course provides an opportunity to examine selected current issues in child and youth and family care. (With approval of a faculty adviser, may be taken more than once for credit) F,S,K or Y(3-0)

### CYC 465 (formerly CYC 375) (1½) THEORY OF CHILD AND YOUTH CARE PRACTICE WITH GROUPS

Theoretical approaches and techniques related to the planning and management of groups are presented. Content focuses on students developing plans to organize and conduct groups for children and youth. F(3-0)

### CYC 466 (formerly 376) (1½) THEORY OF CHILD AND YOUTH CARE PRACTICE WITH FAMILIES

This course presents conceptual frameworks and models for understanding family functioning and parenting. The child and youth care service settings in which family work occurs are identified; family assessment methodologies and interventions which are appropriate to Child and Youth Care Workers in these settings are presented. F(3-0)



**CYC 474 (1½) CHILD AND YOUTH CARE PRACTICE WITH INDIVIDUALS**

This course focuses on the development of skills in working with individual children and youth. Students are required to apply behavioural change theories in a laboratory environment. They will receive feedback on their application of interventions in child and youth care practice. (3-0)

**CYC 475 (1½) DISCUSSION AND COUNSELLING GROUPS WITH CHILDREN AND YOUTH**

This course focuses on developing the knowledge and skills required for the organizing and managing of groups with children and youth. Students are required to apply theory through group interventions and will receive feedback on their work in a laboratory environment. (Prerequisite: 465) (3-0)

**CYC 476 (1½) CHILD AND YOUTH CARE PRACTICE WITH FAMILIES**

This course focuses on the development of skills related to child and youth care practice with families. Students are required to apply theory through interventions for children, parents and their families based on the assessed needs and identified goals. Students work in a laboratory environment and receive feedback on their approaches and style in working with families. (Prerequisite: 466) (3-0)

**CYC 490 (½, 1, 1½ or 3) DIRECTED STUDIES IN CHILD AND YOUTH CARE**

Research projects, directed reading, or additional course work in a specified area. (May be taken more than once for credit, provided the course content is different from that previously taken) F,S,K or Y

## SCHOOL OF HEALTH INFORMATION SCIENCE

Paul D. Fisher, B.Sc. (U. of Vic.), M.Sc., Ph.D. (Alta.), Associate Professor and Director of the School

Denis J. Protti, B.Sc. (Alta.), M.Sc. (Man.), Professor

Gerhard W. Brauer, B.A. (U. of Vic.), M.A. (Brit. Col.), Associate Professor

Jochen R. Moehr, Staatsexamen, Dr.med. (Marburg), Habilitation Medizinische Informatik (Hanover Med. School), Professor

Lawrence R. Scott, B.Sc., B.Sc. (U. of Vic.), Cooperative Education Coordinator

Jennifer Vincent, B.Sc. (Bishop's), M.Sc. (U. of Vic.), Systems Coordinator

**Visiting, Adjunct and Cross-listed Appointments:**

Gerrit W. Clements, B.A. (Calg.), LL.B. (Alta.), Adjunct Professor (1994-95)

Kathryn J. Hannah, R.N., B.S.N., M.S.N. (Med. Coll. of Georgia), Ph.D. (Alta.), Adjunct Professor (1993-95)

Kenneth R. Thornton, B.Sc., M.B.Ch.B. (Leeds), F.R.C.Psych., Adjunct Professor (1993-95)

Fernande P. Harrison, B.Sc., M.H.S. (Alta.), Adjunct Associate Professor (1994-95)

Donald W. Juzwishin, B.A., M.H.S.A. (Alta.), Adjunct Assistant Professor (1994-95)

University of Victoria students (those seeking admission from another faculty and those previously enrolled in the Program) must submit an Application for Reregistration and a Health Information Science Application Form to Records Services by April 30.

Credit for previous postsecondary studies may be granted as appropriate. Applicants seeking advanced placement are advised to read the minimum degree requirements on page 23 of the Calendar.

### STANDING

Students who do not maintain a sessional grade point average of 3.50 or better will normally be required to withdraw from the School.

A student in the School of Health Information Science should inform the Director of any intended prolonged absence. Students should not assume that readmission to the School is guaranteed.

A graduating GPA of 3.5 or higher, calculated as described in the UVic calendar, is required for graduation. Students deficient in this requirement will be placed on probation and must take additional, appropriate, 300 or 400 level courses in order to raise their graduating GPA to 3.5 or higher.

### COOPERATIVE EDUCATION

Please refer to page 38 of the Calendar for the general description of Cooperative Education.

The distinguishing feature of the Cooperative Education approach is the inclusion, as an integral part of the degree, of four Work Terms of approximately four months duration each (13 weeks minimum). These Work Terms begin after the student's Second Year and normally alternate with formal academic terms in Health Information Science. Students with prior relevant work experience may, on admission, apply for exemption from the first Work Term via a formal Work Term Challenge (see page 38).

During a Work Term, students are employed in a full time, health care related job in either the public or private sector. For all practical purposes, Cooperative Education students on Work Terms are regular employees and receive salary and benefits in accordance with the employer's policy. Both the employer and the University evaluate the student's performance on each Work Term. Each Work Term is recorded on the student's Official Transcript of Academic Record (as COM, N, or F). Details of Work Terms are recorded on the Record of Work Terms which is attached to the Academic Record.

### PROGRAM REQUIREMENTS

To meet the requirements of the degree in Health Information Science, students must complete 60 units which include a core of 43.5 units, a minimum of 4.5 units selected from the Area of Concentration courses, 12 units of other electives, and a minimum of four Coop Work Terms (students with prior relevant work experience may challenge one of the required work terms). Work term placements are across Canada and students must be prepared to accept placement outside of Victoria.

### PROGRAM

Health Information Science is the study of the nature of information and its processing, application and impact within a health care system. Health Information Science integrates management sciences, computing and communications technologies, and information systems with formal study of health care systems. The Bachelor of Science in Health Information Science is a four year Cooperative Education program consisting of an introductory first year, followed by three years in the School itself.

### ADMISSION REQUIREMENTS

Students may be formally admitted to the School of Health Information Science upon successful completion of 15 units of appropriate university level credit.

Admission to the School of Health Information Science is limited to approximately 30 students per year. Students are selected on the basis of grades, a personal written submission and an interview. A grade point average of at least 3.50 in the immediately preceding 15 units of university level studies and completion of the prerequisite courses are normally required for admission into the School.

Prospective students are encouraged to consult the School prior to or during their first year of University studies.

Applicants transferring from postsecondary institutions must submit an Application for Admission to the University and a Health Information Science Application Form to the Director of Admission Services by April 30. Forms are available from Admission Services.



**First Year (Pre-Health Information Science Year):**

Although not a prerequisite for admission, students wishing to enter the School are strongly encouraged to take HINF 170/171/172 in the first year, i.e. prior to admission.

|          |      |  |
|----------|------|--|
| C SC 110 | (1½) | Fundamentals of Programming: I   |
| C SC 115 | (1½) | Fundamentals of Programming: II  |
| ENGL     | (3)  | Any 1st year English courses are acceptable<br>English 115 and English 116 are recommended |

|          |      |   |
|----------|------|---|
| HINF 170 | (1½) | Introduction to Health Information Science: I |
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|          |      |  |
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| HINF 171 | (1½) | Introduction to Health Information Science: II |
|----------|------|--|

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| HINF 172 | (1½) | Introduction to Health Informatics Applications |
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| MATH 102 | (1½) | Calculus for Students in the Social and Biological Sciences |
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|          |      |             |
|----------|------|-------------|
| MATH 100 | (1½) | Calculus: I |
|----------|------|-------------|

|          |      |                    |
|----------|------|--------------------|
| MATH 151 | (1½) | Finite Mathematics |
|----------|------|--------------------|

1½ units of electives

**Second Year: First Term**

|          |      |                       |
|----------|------|-----------------------|
| HINF 220 | (1½) | Hospital Organization |
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| HINF 240 | (1½) | Introduction to the Structure and Governance of Health Care Systems |
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| CSC 265 | (1½) | Software Engineering: I |
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| STAT 255 | (1½) | Statistics for Life Sciences: I |
|----------|------|---------------------------------|

1½ units of electives

**Second Year: Second Term**

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|---------|------|----------------------------------|
| CSC 375 | (1½) | Introduction to Systems Analysis |
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|----------|------|---------------------|
| HINF 270 | (1½) | Medical Methodology |
|----------|------|---------------------|

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| STAT 256 | (1½) | Statistics for Life Sciences: II |
|----------|------|----------------------------------|

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| HINF 315 | (1½) | Human Communications and Relations in Health Care |
|----------|------|---|

1½ units of electives

**Second Year: May-August**

COOP work term

**First and Second Year Electives:**

|         |     |                             |
|---------|-----|-----------------------------|
| C W 101 | (3) | Basics of Practical Writing |
|---------|-----|-----------------------------|

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|---------|------|---------------------------------------|
| CSC 200 | (1½) | Computers in Statistical Applications |
|---------|------|---------------------------------------|

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| CSC 225 | (1½) | Algorithms and Data Structures: I |
|---------|------|-----------------------------------|

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|---------|------|---|
| CSC 230 | (1½) | Computer Architecture & Assembly Language |
|---------|------|---|

|          |      |                              |
|----------|------|------------------------------|
| ECON 201 | (1½) | Principles of Microeconomics |
|----------|------|------------------------------|

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| ECON 202 | (1½) | Principles of Macroeconomics |
|----------|------|------------------------------|

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|----------|------|-----------------------|
| MATH 224 | (1½) | Logic and Foundations |
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| PHIL 201 | (1½) | Applied Logic: I |
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| PHIL 220 | (1½) | Introduction to the Philosophy of Science |
|----------|------|---|

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| THEA 150 | (1½) | Speech Communication |
|----------|------|----------------------|

**Third Year: First Term**

|          |      |                                       |
|----------|------|---------------------------------------|
| HINF 300 | (1½) | Principles of Health Data Base Design |
|----------|------|---------------------------------------|

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| HINF 340 | (1½) | Principles of Community Health |
|----------|------|--------------------------------|

|          |      |                              |
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| HINF 380 | (1½) | Introduction to Epidemiology |
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3 units of electives

**Third Year: Second Term**

COOP work term

**Third Year: May-August**

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|----------|------|--------------------------------------|
| HINF 325 | (1½) | Fiscal Management in Health Services |
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| HINF 330 | (1½) | Legal Issues in Health Informatics |
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| HINF 351 | (1½) | Hospital Information Systems |
|----------|------|------------------------------|

|          |      |                              |
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| HINF 415 | (1½) | Patient Care Support Systems |
|----------|------|------------------------------|

|          |      |  |
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| HINF 450 | (1½) | Principles of Health Information System Design |
|----------|------|--|

**Fourth Year: First Term**

COOP work term

**Fourth Year: Second Term**

|          |      |                                |
|----------|------|--------------------------------|
| HINF 410 | (1½) | Administrative Support Systems |
|----------|------|--------------------------------|

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|----------|------|---------------------------------------|
| HINF 445 | (1½) | Distributed Processing in Health Care |
|----------|------|---------------------------------------|

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| HINF 460 | (1½) | Quality Assurance and Ethics |
|----------|------|------------------------------|

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| HINF 480 | (1½) | Epidemiology in Health Services Management |
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1½ units electives

**Fourth Year: May-August**

COOP work term

**Fifth Year: First Term**

Electives (7½)

Students normally select a minimum of 4½ units from one or more of the Areas of Concentration to complete their degree. Other senior level courses may be taken with the approval of the Director.

Health Information Science students require permission of the Dean of Engineering to take Engineering courses.

ADMN 424 may not be taken for credit by students of Health Information Science.

**Area of Concentration — Administration**

|          |      |                         |
|----------|------|-------------------------|
| ADMN 406 | (1½) | Organizational Analysis |
|----------|------|-------------------------|

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| ADMN 431 | (1½) | Personnel Management in the Public Sector |
|----------|------|---|

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| HSD 400 | (1½) | Policy in the Human Services |
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|         |      |                             |
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| HSD 401 | (1½) | Women in the Human Services |
|---------|------|-----------------------------|

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|----------|------|---------------------|
| HINF 440 | (1½) | Health Care Systems |
|----------|------|---------------------|

|          |      |                            |
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| HINF 444 | (1½) | Issues in Community Health |
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| NURS 450 | (1½) | Administration in Health Services |
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| PHIL 330 | (1½) | Professional and Business Ethics |
|----------|------|----------------------------------|

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|----------|------|-----------------------------|
| PHIL 331 | (1½) | Issues in Biomedical Ethics |
|----------|------|-----------------------------|

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| PSYC 334A | (1½) | Personnel and Organization Psychology |
|-----------|------|---------------------------------------|

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| SOCW 450 | (1½) | Administration in the Human Services |
|----------|------|--------------------------------------|

**Area of Concentration — Health Services Research**

|          |      |                                  |
|----------|------|----------------------------------|
| ADMN 437 | (1½) | Public Sector Program Evaluation |
|----------|------|----------------------------------|

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| ANTH 312 | (1½) | Medical Anthropology |
|----------|------|----------------------|

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| ECON 317 | (1½) | The Economics of Canadian Health Care |
|----------|------|---------------------------------------|

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| ECON 416 | (1½) | Cost Benefit Analysis: Principles and Application |
|----------|------|---|

|          |      |                           |
|----------|------|---------------------------|
| PHIL 332 | (1½) | Philosophy and Technology |
|----------|------|---------------------------|

|          |      |                                     |
|----------|------|-------------------------------------|
| SOCI 371 | (1½) | Statistical Analysis in Sociology I |
|----------|------|-------------------------------------|

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| SOCI 445 | (1½) | Sociology in Health and Medicine |
|----------|------|----------------------------------|

|          |      |                                       |
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| SOCI 471 | (1½) | Statistical Analysis in Sociology: II |
|----------|------|---------------------------------------|

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| STAT 354 | (1½) | Sampling Techniques |
|----------|------|---------------------|

|          |      |  |
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| STAT 453 | (1½) | The Design and Analysis of Experiments |
|----------|------|--|

**Area of Concentration — Medical Informatics**

|          |      |                         |
|----------|------|-------------------------|
| CENG 420 | (1½) | Artificial Intelligence |
|----------|------|-------------------------|

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| CENG 485 | (1½) | Pattern Recognition |
|----------|------|---------------------|

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| C SC 350 | (1½) | Computer Architecture |
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|          |      |   |
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| C SC 355 | (1½) | Digital Logic and Computer Organization |
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| C SC 360 | (1½) | Introduction to Operating Systems |
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| C SC 370 | (1½) | Database Systems |
|----------|------|------------------|

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| C SC 450 | (1½) | Computer Communications and Networks |
|----------|------|--------------------------------------|

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| HINF 385 | (1½) | Nursing Informatics |
|----------|------|---------------------|

**COURSES**

Health Information Science students must have successfully completed HINF 170, 171 and 172 prior to taking 300 and 400 level courses. Students from other schools or departments may take 300 and 400 level courses with the permission of the Director and their respective Director or Chair. If enrollment restrictions are necessary, preference will be given to students registered in the Faculty of Human and Social Development.



(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

#### **HINF 170 (1½) INTRODUCTION TO HEALTH INFORMATION SCIENCE: I**

An introduction to the knowledge and skills expected of a professional working in the field of Health Information Science. The basic concepts of the field are established, the methodologies used are investigated, the organizational settings are identified, and the people involved are introduced. F(3-0)

#### **HINF 171 (1½) INTRODUCTION TO HEALTH INFORMATION SCIENCE: II**

This is an introductory course that broadly covers general systems theory, biomedical imaging, analog to digital conversion of physiological signals, and the construction and principles of operation of computers as they relate to health information data acquisition and management. (Corequisites: CSC 110) F(3-2)

#### **HINF 172 (1½) INTRODUCTION TO HEALTH INFORMATICS APPLICATIONS**

Health information systems are comprised of computer programs generated using a variety of data manipulation and management techniques. The course will cover the general application of spreadsheets and databases to health information management. In addition many specific health care applications such as medical graphics, multi-media medical information systems, acute care physiological signal processing, diagnostic expert system design, community health information systems, health information networks will be addressed. (Prerequisite: 171, Corequisite: CSC 115) S(3-3)

#### **HINF 220 (1½) HOSPITAL ORGANIZATION**

This course introduces students to the organizational structure and function of hospitals, the coordination of departmental and program roles, and communication linkages. F(3-0)

#### **HINF 240 (1½) INTRODUCTION TO THE STRUCTURE AND GOVERNANCE OF HEALTH CARE SYSTEMS**

An overview of the history, structure, function and governance of health care systems, with special attention to the Canadian health care systems. While initial emphasis is placed on the complexity of the underlying concepts of health and health care, later discussions consider, on a very practical level, the interdependencies among the many components of health care systems. Students are ultimately encouraged to participate in discussions concerning the dynamics and stresses which influence and determine changes in health care systems around the world. (Corequisite: 170) F(3-0)

#### **HINF 270 (1½) MEDICAL METHODOLOGY**

The process of clinical decision making in diagnosis, treatment planning, and prognosis. Alternate models for clinical decision making using subjective and objective data and information. (Corequisites: 220, 240) S(3-0)

#### **HINF 300 (1½) PRINCIPLES OF HEALTH DATABASE DESIGN**

This course addresses the issues facing a database designer in the development of database applications appropriate for health data of various kinds. The content includes the elements of conceptual, implementation and physical database design to support health information systems. (Prerequisites: 172; and CSC 265 or CSC 275) F(3-3)

#### **HINF 315 (1½) HUMAN COMMUNICATIONS AND RELATIONS IN HEALTH CARE**

The modalities of communication and their application to the various health care professions, industries, clients and patients will be examined and practised. Written communications, oral presentations, A/V and electronic modalities, issues of professional contact and of the power structure in health professions and facilities are reviewed. (Prerequisite: 3 units of 100 level English) S(3-0)

#### **HINF 325 (1½) FISCAL MANAGEMENT IN HEALTH SERVICES**

An examination of the systems and financial reporting required to support management decision making in health care delivery. Topics include institutional accounting and budgeting, provincial and federal government requirements, clinical program budgeting. Principles are learnt through the use of application software in computer laboratory. (Prerequisite: 300) K(3-2)

#### **HINF 330 (1½) LEGAL ISSUES IN HEALTH INFORMATICS**

This course introduces Health Information Science students to legal aspects of their profession, including aspects of confidentiality, liability and contractual issues. Students will gain an appreciation for legal terminology, reasoning, and processes as well as basic principles of law which apply to and govern the delivery of health informatics in Canada. K(3-0)

#### **HINF 340 (1½) PRINCIPLES OF COMMUNITY HEALTH**

Develops an appreciation of the principles and practice of health protection and promotion in the community, including consideration of occupational and environmental health concerns. Particular attention is given to the changing roles and functions of health professionals and to the investigative and service delivery aspects of community medicine. May in some years focus on issues in the delivery of health care in Third World countries. (Prerequisite: 270) F(3-0)

#### **HINF 351 (1½) HOSPITAL INFORMATION SYSTEMS: I**

This course simulates what a hospital normally goes through when it conceptualizes the need for a hospital information system, identifies its goals and objectives for the system, prepares a request for proposal (RFP), and selects a particular system. The various methodologies and dynamics involved are investigated. (Prerequisites: 220, 270 and CSC 375; Corequisite: 300) K(2-1)

#### **HINF 380 (1½) INTRODUCTORY EPIDEMIOLOGY**

An introduction to the principles and methods of epidemiology. The course focuses on the investigation and measurement of disease and the risk of disease in populations. (Prerequisites: 270 and STAT 250 or 255) F(3-2)

#### **HINF 385 (1½) NURSING INFORMATICS**

This course is designed to facilitate the exploration of the impact of information technology in relation to the nursing profession. Course content focuses on computer applications and related issues in nursing practice, nursing administration, nursing education, and nursing research. Credit will not be given for both 385 and NURS 485. May not be offered every year. (Prerequisite: 351) NO(3-0)

#### **HINF 410 (1½) ADMINISTRATIVE SUPPORT SYSTEMS**

An in depth study of the evolving organization structures in the management of information resources in health care facilities. Topics include: characteristics and role of the Chief Information Officer, status and future implications of end-user computing, critical importance of managing the human side of information systems. (Prerequisite: 325) S(3-0)

#### **HINF 415 (1½) PATIENT CARE SUPPORT SYSTEMS**

Provides a thorough coverage of concepts, methodologies and techniques available to support patient care processes through the use of information technology. Includes a review of factual and patient information systems, signal and pattern processing applications, decision support, simulation, education and training applications. (Prerequisite: 351) K(4-0)

#### **HINF 440 (1½) HEALTH CARE SYSTEMS**

An examination of the structure and function of the current health delivery system, particularly from the point of view of how information flow influences health care trends and policy formulation. Emphasis is on community, regional, provincial and national information flows. (Prerequisite: 340) S(3-0)



**HINF 444 (1½) ISSUES IN COMMUNITY HEALTH**

Examination in greater depth of the field of community health, including health indicators, the concept of the health community, disease prevention and issues of the developing regions of the world. May not be offered every year. (*Prerequisite*: 340) S(3-0)

**HINF 445 (1½) DISTRIBUTED PROCESSING IN HEALTH CARE**

A management perspective to data communications technology, networks, and distributed processing. Emphasis is on examining the impact of emerging communications microcomputer technology on information systems in varying sectors of the health care delivery system. (*Prerequisite*: 300) S(3-2)

**HINF 450 (1½) PRINCIPLES OF HEALTH INFORMATION SYSTEM DESIGN**

Provides thorough coverage of the specific requirements of the development of contemporary and future information systems in health care. To this end, the course covers the technical principles underlying such systems. On this basis knowledge and skills required for the design, implementation, maintenance and replacement of complex information systems in health care are developed in lectures and exercises including contemporary computer-based aids. (*Prerequisite*: 300; *Corequisite*: 351) K(3-3)

**HINF 460 (1½) QUALITY ASSURANCE AND ETHICS**

Provides an in depth assessment of the quality, interpretation and use of health data in the area of direct patient care. Students analyze the data elements and the methodologies used to assess such factors as quality, social impact and clinical significance. The ethical and confidentiality issues encountered are examined. (*Prerequisite*: 270) S(3-0)

**HINF 480 (1½) EPIDEMIOLOGY IN HEALTH SERVICES MANAGEMENT**

An examination of the principles and methods of managerial epidemiology. The course focuses on the design, implementation and evaluation of epidemiological analyses as applied to management in the health and social services, including the role of epidemiology in health services planning and policy formulation, health status indicators, outcome measurement and utilization analysis. Emphasis is placed on the ability to write effective issue papers for senior management and granting agencies. (*Prerequisite*: 380) S(3-2)

**HINF 490 (1½ or 3) DIRECTED STUDY**

Students wishing to pursue a course of directed readings or of a directed project should consult with a faculty member willing to supervise such a course, formulate a proposal describing both the content of the course and a suitable means of evaluating the student's work. The proposal must then receive the approval of the Director. (May be taken more than once for credit provided the course content is different from that previously taken.) FSK

**HINF 491 (1½) TOPICS IN HEALTH INFORMATION SCIENCE**

Through this course the Program offers advanced topics in various areas of Health Information Science. Information on the topics available in any given year will be available from the Director. Entry to this course will be restricted to third and fourth year students who meet the prerequisite specified for the topic to be offered. (May be taken more than once for credit, provided the course content is different from that previously taken) FS(3-0)

## SCHOOL OF NURSING

Anita E. Molzahn, B.Sc., M.N., Ph.D. (Alta.), Associate Professor and Director of the School

Carolyn Attridge, B.Sc.N. (McM.), M.N. (Wash.), M.A., Ph.D. (Tor.), Associate Professor

John Howard Brunt, B.A. (U. of Florida), A.D.N. (U. of Vermont), M.Sc.N. (Yale), Ph.D. (Calg.), Associate Professor

Jean Isobel Dawson, B.Sc.N. (McG.), M.Sc.N. (St. Louis), M.A., Ph.D. (Tor.), Associate Professor

Elaine M. Gallagher, B.Sc. (Windsor), M.Sc. (Duke), Ph.D. (S. Fraser), Associate Professor

Marcia D. Hills, B.Sc. (Alta.), M.A., Ph.D. (U. of Vic.), Associate Professor and Outreach Coordinator

Gweneth A. Hartrick, B.S.N., M.A., Ph.D. (U. of Vic.), R.N. (Sask. Inst. Appl. Arts), Assistant Professor

Martha J. Haylor, B.S.N. (Ore.), M.N., M.S., Ph.D. (Ore. Health Sci. U.), Assistant Professor

A. Elizabeth Lindsey, B.S.N., M.A., Ph.D. (U. of Vic.), Assistant Professor

Mary Ellen Purkis, B.S.N. (Calg.), M.Sc., Ph.D. (Edin.), Assistant Professor

Laurene E. Shields, B.S.N. (U. of Vic.), M.S., Ph.D. (Ore.), Assistant Professor

Brad F. Hagen, M.Sc.N. (McG.), Senior Instructor

Patricia K. Blondé, Administrative Officer

Marilyn Brown, B.A. (Wat.), Continuing Studies Program Coordinator

Barbara Courtney Young, B.S.N. (U. of Vic.), Continuing Studies Program Coordinator

Linda J. Dryden, M.Sc. (Col.), Practica Coordinator

Jeannine T. Moreau, B.S.N. (U. of Vic.), Admissions Liaison Officer

Julianne Sanguins, B.Sc.N. (Tor.), M.Sc. (U. of Portland), Practica Coordinator

**Visiting, Adjunct and Cross-listed Appointments:**

Gerrit W. Clements, B.A. (Calg.), LL.B. (Alta.), Adjunct Professor (1994-96)

R. Lynn Stevenson, B.Sc., M.A. (U. of Vic.), Adjunct Assistant Professor (1994-96)

Pearl Stoker, B.N., M.N. (Manit.), Adjunct Assistant Professor (1994-96)

Fiona G. Sudbury, B.Sc.N., M.H.C. (McM.), Adjunct Assistant Professor (1994-96)

Alice Taft, B.Sc. (Brit. Col.), M.H.A. (Ott.), Adjunct Assistant Professor (1994-96)

Robert D. Tornack, B.Sc.N. (Brit. Col.), M.B.A. (Wash.), Adjunct Assistant Professor (1994-96)

## PROGRAM OFFERED

The School of Nursing offers a program of studies leading to a B.S.N. degree for registered nurses and for students continuing in the Collaborative Nursing Program from the partnership community colleges of Camosun, Langara, North Island, Selkirk, and the University College of the Cariboo, Okanagan University College and Malaspina University College.

Arrangements are available for students who were enrolled prior to September 1994 to complete their B.S.N. within the structure of the Collaborative Nursing Program.

The collaborative nursing program offers students three learning options.

**Option A:** This option involves completion of the program of studies in its entirety in order to obtain a baccalaureate degree in nursing. Students choosing this option enter the program at one of the community colleges. On completion of five semesters and two consolidated clinical experiences, students, if admitted, may transfer to the University School of Nursing in order to complete three academic semesters and three consolidated nursing practice experiences to graduate with a degree.

**Option B:** This option allows students to exit from the program with a nursing diploma having completed five academic semesters, two consolidated clinical experiences, and a bridge-out experience which has been designed to prepare students for the workplace. These students would apply to write registration examinations to practice as nurses in British Columbia.



**Option C:** This option is designed to allow practicing registered nurses who have a diploma to bridge into the program, to complete four academic semesters and two optional consolidated nursing practice experiences in order to graduate with a B.S.N. degree. The initial semester is designed to build on the existing knowledge and skills of registered nurses, particularly in the areas of teaching/learning, ethics, health promotion, family nursing and gender issues.

**Cooperative Education Option:** Subject to the availability of funding it is planned that a cooperative education option will be introduced to the nursing program.

The University of Victoria School of Nursing is involved in Option A and Option C. All three options also will be offered at the University College of the Cariboo, Okanagan University College and Malaspina University College.

The collaborative curriculum is based on a philosophy which reflects a commitment to implement a humanistic, phenomenological and socially critical curriculum which considers the changing health care needs of our society. The philosophy is considered to be alive and evolving. Emerging from the philosophy is the metaconcept of caring. Caring is understood as the attitude and activity of nursing and will be considered in every nursing course.

Another unique feature of this curriculum is the emphasis on nursing practice experience as the foundation of nursing theory and the recognition that nurses' work requires thoughtful, reflective action as defined by the concept of praxis. To assist in actualizing the concept of praxis, nursing practice experiences have been planned and integrated throughout the program of studies. In addition, there will be opportunity for three 5-week preceptorships. Subject to the availability of funding, a cooperative education option may be offered.

Emerging from this philosophical orientation is a health promotion perspective that has been used as a conceptual framework to organize the curriculum. This framework acknowledges the need for a socio-ecological perspective with a multidisciplinary focus. This shift in focus from illness to health represents a deliberate move away from a medical model to an understanding of nurses' work as focusing on people and their experiences with health and healing. Inherent in this orientation will be the use of innovative teaching methodologies which encourage the development of critical thinking, discovery of personal meaning and empowerment.

## PURPOSE OF THE COLLABORATIVE NURSING PROGRAM

The purpose of this program is to educate nurses to work with individuals, families, groups or communities from a health promotion perspective and an ethic of caring. The program will provide students with an opportunity to develop a sensitivity to people's experiences with health and healing. By being cognizant of nurses' professional role, students will learn to work as partners with clients and with other health care providers. Through their understanding and participation in the changing health care system, graduates will be active participants in creating health for all.

**Distance Education:** For post-RN students the entire B.S.N. program is available by distance education. For students continuing from designated college programs, some courses specified by the School of Nursing will be available by distance education.

Distance education courses are available on a planned rotation and scheduled for three terms a year. Formats for delivery of distance education courses vary from direct face to face interaction between teachers and learners to a more media-based format involving print, audio, video and tele-conferencing. Some are offered in cooperation with the Division of Continuing Studies in the evening or on weekends during the Winter Session (September-April) and in the daytime or late afternoon during May-June and July-August. Other courses may be taken through the Open Learning Agency or other post secondary institutions with permission of the School. Distance courses are subject to the availability of budget, qualified faculty and clinical resources.

## ADMISSION REQUIREMENTS

B.S.N. for Registered Nurses (Option C):

(a) Residing in B.C., Yukon or Northwest Territories throughout the duration of the program.

- (b) Active practising registration as a Registered Nurse in British Columbia which must be maintained for the duration of the program (or the equivalent in other Canadian jurisdictions in which the student is taking the program).
- (c) Two current work references, preferably from persons in a nursing supervisory capacity, indicating a competent standard of nursing practice.
- (d) Completed School of Nursing application form including essay.
- (e) Students must provide evidence of complete current immunizations upon admission to the program.

**NOTE:** (1) Each applicant will be assessed individually by the School of Nursing. Admission to the program is limited. Students will be admitted to the program as resources permit.

**NOTE :** (2) Applications for admission for September entry to the program for both on and off campus students must be submitted by January 31. Applications for January entry and for May entry must be submitted by September 30 and December 31 respectively.

**B.S.N. for Community College Students Continuing in Collaborative Nursing Program (Option A):**

- (a) meet admissions requirements under the Undergraduate Admission section of the University of Victoria calendar at the time of entering year 1 at the college.
- (b) normally successful completion of semesters 1 to 5. A cumulative GPA of equivalent to 3.50 on the UVic 9.0 point scale is required.
- (c) maintaining satisfactory progression in term 5 that meets University of Victoria progression requirements.
- (d) a completed School of Nursing application form.
- (e) students must provide evidence of complete current immunizations upon admission to the program.

**NOTE** to students about space availability: Acceptance to and completion of the community college portion of the program does not ensure a seat in the University of Victoria School of Nursing; students will be admitted to the program as resources permit in accordance with a selection process developed by the School of Nursing.

## PROGRAM REQUIREMENTS

Applicants must meet the general University requirements on pages 9-23 of this Calendar. Of special note are the following regulations:

1. All students must meet the English requirement as set forth on page 15 of the Calendar.
2. All students must maintain a cumulative grade point average of 3.50 to proceed through the program and graduate. If below this level, students will be required to discuss their program with the Director of the School and may be required to withdraw. For UVic progress requirements, see page 22 "Standing: Academic Probation and Minimum Grade Point Average". Normally, all students registered in any nursing practice course must pass each course before proceeding to the next practice course. Students may, with permission of the Admission and Progress Committee, repeat a failed nursing practice course and may be placed on academic probation. The privilege to repeat a failed nursing practice course is allowed only once in the program.
3. All students in the School of Nursing will follow the Faculty's Guidelines for Professional Conduct (see page 256) and will be subject to the provisions of the code of ethics as stated by the Registered Nurses' Association of B.C. (or the provincial/territorial equivalent in which they practice).
4. Registered Nurses in the B.S.N. program must complete 30.0 units of course work. Continuing students will normally complete 31.5 units of course work. If a continuing student chooses the co-operative education option then the student will normally complete 22.5 units of course work. A minimum of 21.0 units of course work must be done through the University of Victoria by all students, although students are encouraged to complete as much of their course work as possible from the University of Victoria.
5. To meet University of Victoria graduation requirements at least 21.0 units must be numbered at the 300 or 400 level (see page 23, Minimum Degree Requirements for Graduation).



6. Registered nurses in the 30.0 unit B.S.N. program may be permitted, with the approval of the Dean of Human and Social Development, to present up to 9.0 units of transfer credit from institutions other than the University of Victoria. Students are advised to ensure the acceptability of such courses by the School of Nursing before enrolling in them.
7. Students admitted to the B.S.N. program after August, 1989, may be eligible to receive up to 3 units of transfer credit for completed college or university level post-basic certificate and/or diploma programs. These units will be considered part of, and not in addition to, the 9.0 units permitted in item 6 above.
8. Registered nurses are admitted to the B.S.N. program on the basis of having completed a diploma program. Therefore, individual courses from that program are not given credit towards the post-RN B.S.N. program.
9. **Prior Learning Assessment:** Prior learning assessment (PLA) is assessment by a qualified faculty member of what has been learned through non-credit education, training, and/or experience, that is comparable to, at the level of, and worthy of credit for a specific course in the program.

In the School of Nursing, the assessment of prior learning will be completed by a faculty member teaching the course or a faculty member with expertise in the content area under study in the course, with appropriate external advice if necessary. Normally, only students who have been admitted to the BSN program can apply for PLA.

Prior learning must be documented in a portfolio. The student is responsible for articulating their knowledge, skills, abilities and values based on documentation that provides evidence of learning. The portfolio should include:

- (a) past work experience, volunteer experience, and non-formal learning activities;
- (b) a description of competencies, knowledge and skills in narrative form that will convey to the faculty member conducting the assessment that the student has the knowledge described in the course description;
- (c) documentation of competencies, knowledge and skills through such materials as transcripts, job descriptions, performance appraisals, samples of work, testimonials, awards, previous credentials, or other materials that document the learning that has occurred.

Initial inquiries should be directed to the School of Nursing, where application forms may be obtained. The PLA fee must be paid prior to the assessment. Once the application has been approved, the PLA fee is not refundable. Students who are requesting prior learning assessment are advised to consult with the Director of the School who will refer them to an appropriate faculty member.

In some cases, challenge examinations, rather than portfolio assessment may be more appropriate to determine credit. The Director or faculty member may recommend challenge examinations if they deem it appropriate. In that case, students will not be charged an additional fee for the challenge examination.

Students who successfully demonstrate prior learning will receive credit for the course specified, as well as a grade, using the same grading scheme that is used in similar courses offered on campus. The student's academic record will reflect that the grade was obtained through PLA. No course whose equivalent already appears on a student's transcript may be completed by PLA.

A maximum of 3 units of academic credit may be obtained through PLA. Access to the assessment of prior learning is dependent upon availability of resources. Credit by PLA is specific to the School of Nursing BSN program and is not necessarily transferable to other programs or universities.

10. The Collaborative Nursing Program must normally be completed within 7 years from the date of admission to the School of Nursing (Option A) at the designated community college. The post-R.N. (Option C) program must normally be completed within six years. The School may require students to reapply for admission and stipulate conditions if the program is not completed within the designated time limits. Readmission to the School may necessitate repetition of nursing courses previously completed if, in the judgement of the Director, curriculum changes and/or length of interruption are sufficient to render the applicant inadequately prepared for the subsequent courses.

## Nursing Practice Requirements:

**All Nursing Students:** Nursing practice experiences in health agencies in and outside of Victoria are essential in the nursing program. It may not be possible to arrange nursing practice experiences in the location and at the time which is preferred by students. Students must arrange their own transportation. Any costs related to travel or accommodation involving nursing practice experiences are the responsibility of the individual students. In the province of British Columbia, as well as a number of other provinces, criminal record checks may be a pre-practice requirement of some agencies. Any costs related to this are the responsibility of the individual students. Some agencies may require students to take an Oath of Confidentiality. Similarly, if any practice experience agencies require basic life support certification or proof of current immunizations, all costs and responsibilities associated with these are the responsibility of the individual students. All students must adhere to the Code of Ethics of the Canadian Nurses Association and Registered Nurses Association of British Columbia Standards of Practice. Failure to adhere to these principles can result in the student being required to withdraw from the program. Applicants are referred to page 256 in the calendar for regulations regarding practice.

**Post-R.N. Students:** In addition to the above, all post-RN students are advised that they must have active practising registration in the province of B.C. for the duration of the program or the equivalent in other jurisdictions in which the student is residing while enrolled in the program. Students must meet licensure requirements of the jurisdiction in which they undertake their nursing practice.

**Baccalaureate Program for Registered Nurses:** The last intake of the 34.5 unit B.S.N. program as outlined below was Winter Session 1993. The courses in this curriculum will not be offered after April 1995. Arrangements are available for students who were enrolled prior to September 1994 to complete their program within the structure of the Collaborative Nursing Program.

### Year 3

|                         |      |
|-------------------------|------|
| NURS 306                | (3)  |
| NURS 307                | (3)  |
| NURS 308                | (1½) |
| NURS 309                | (1½) |
| NURS 310 (formerly 402) | (1½) |
| SOCI 305*               | (3)  |

### Year 4

|                                |      |
|--------------------------------|------|
| NURS 401                       | (1½) |
| NURS 404                       | (1½) |
| NURS 406 (formerly 303) or 407 | (3)  |
| NURS 415                       | (3)  |
| NURS 450                       | (1½) |

Three units from the following:

|                                |      |
|--------------------------------|------|
| NURS 480, 481A/B/C/D, 482,     |      |
| NURS 483, 484, 485, 486,       |      |
| NURS 490, HSD 400 or ADMN 311, |      |
| HSD 401, HSD 402, HSD 460,     |      |
| PHIL 431, HINF 491             | (3)  |
| HSD 425* (formerly 350)        | (1½) |
| PHIL 331                       | (1½) |

One of the following courses

|                               |      |
|-------------------------------|------|
| pertaining to the elderly:    |      |
| PSYC 333B, SOCI 385*, PE 449* | (1½) |

Elective(s)\*\*: Any course(s) at UVic or transferable to UVic, at the 100 level or above outside the School. (3)

\* Alternative courses to meet these requirements may be chosen in consultation with the Director of the School or a designated faculty representative. Students taking SOCI 305 and SOCI 371 must ensure they have the required prerequisite (see page 157).

\*\* Additional electives open to students in the Schools of Child and Youth Care, Health Information Science, Nursing, Public Administration, and Social Work are courses offered by the Faculty of Human and Social Development: Policy in the Human Services (HSD 400) and Women in the Human Services (HSD 401). (See page 257.)



**Collaborative Nursing Program:** Students will take the following courses:

**Bridge-In (Returning R.N.'s)**

|                 |      |
|-----------------|------|
| NURS 320        | (1½) |
| NURS 330        | (1½) |
| NURS 340**      | (1½) |
| NURS 331        | (1½) |
| Support Course* | (1½) |

**Term 6**

|            |      |
|------------|------|
| NURS 351** | (1½) |
| NURS 350   | (1½) |
| NURS 351   | (1½) |
| NURS 352   | (1½) |
| NURS 360   | (1½) |

**Nursing Practice Term\*\*\***

|          |     |
|----------|-----|
| NURS 370 | (3) |
|----------|-----|

**Term 7**

|                         |      |
|-------------------------|------|
| NURS 430                | (1½) |
| NURS 431                | (1½) |
| PKG III* support course | (1½) |
| HSD 377                 | (1½) |
| HSD 425                 | (1½) |

**Nursing Practice Term\*\*\***

|          |     |
|----------|-----|
| NURS 470 | (3) |
| NURS 475 | (3) |

\*\*\*Nursing Practice Terms are mandatory for continuing students and optional for post-RNs.

**Term 8**

|                           |      |
|---------------------------|------|
| NURS 491 Nursing Practice | (4½) |
| NURS 492 Nursing Theory   | (3)  |

To satisfy the 7½ unit requirement for Term 8, students must develop an approved plan for an area of focused study. Normally, the student will complete all 7½ units at the 400 level.

\* Students have the opportunity to develop a perspective by taking courses in other disciplines. The intent is for students to select support courses that enhance their B.S.N. course work. Support courses can be courses at UVic or transferable to UVic, at the 100 level or above, outside the School.

\*\* Nursing 356 and Nursing 433, available at Okanagan University College only, may be used in lieu of Nursing 340 and Nursing 341 respectively.

## COURSES

Courses offered by departments other than the School of Nursing are described under the appropriate heading in the Calendar. Students should note carefully any departmental prerequisites for courses. If prerequisites cannot be met, students are advised to consult with the appropriate department chair.

All Nursing courses are open to Nursing students only unless otherwise noted in the course description. When a course is over subscribed, preference will be given to nursing students who are closest to graduation.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### NURS 306 (3) COMMUNITY CLINICAL STUDIES

This course is an introduction to community based nursing theory and practice relevant, focusing on individuals and groups across the lifespan. Nursing's use of concepts such as health promotion and wellness are explored. The application of epidemiological methods in professional nursing practice are examined. A community health assessment is included in the clinical practicum. It is assumed that students are competent in the use of the nursing process. NO(3-5-1)

### NURS 307 (3) FAMILY FOCUSED CLINICAL STUDIES

This course focuses on nursing theory and clinical practice relevant to nursing of the family across the lifespan. Students apply a family nursing framework in their clinical practicum, in which they work with healthy, at-risk and dysfunctional families including those with chronic illness and special health challenges. Concepts such as change and crisis as they apply to families are explored. (Prerequisite: 309; or permission of the Director or designate) (Normally, program credit will not be granted for 307 and 330, 331) NO(3-5-1)

### NURS 308 (1½) CONCEPT DEVELOPMENT IN NURSING PRACTICE

This course focuses on the process of developing concepts relevant to the practice of nursing. The process will be examined through the building of conceptual packages for each of several concepts (such as pain and grief). For each concept studied, students will have an opportunity to think critically about relevant clinical research findings, theoretical formulations and data derived from expert practice. The course assumes that students have had experience in using the nursing process in practice. (Normally, program credit will not be granted for 308 and 340) NO(3-0)

### NURS 309 (1½) COMMUNICATION IN NURSING

This course focuses on the study of effective interpersonal communication in the client-nurse and nurse-colleague relationships. Theories of interpersonal communication form the foundation for skill-building of a mutual, problem solving approach with clients and colleagues. Students will learn to establish, maintain and terminate effective helping relationships with individuals. Expectations are for competency in assessment, planning, and evaluation interviews and for enhanced skills in difficult client-nurse and nurse-colleague situations. (Normally, program credit will not be granted for 309 and 352) NO(3-0)

### NURS 310 (formerly 402) (1½) THE TEACHING-LEARNING PROCESS IN HEALTH CARE

This course is designed to enable nurses and other health professionals to recognize and take advantage of health related client teaching opportunities in various health care environments. Emphasis is given to the assessment of learner characteristics, establishing objectives, selection and adaptation of teaching techniques appropriate to client situations and to the establishment of criteria for the evaluation of teaching effectiveness. (Open to students in Nursing and, with the instructor's permission, to other health professionals) NO(3-0)

### NURS 320 (1½) PROFESSIONAL GROWTH BRIDGE-IN

This course provides an overview of the philosophy of the collaborative generic curriculum. Participants will have opportunities to examine concepts and theories related to teaching/learning, ethics and gender issues. F(3-0)

### NURS 330 (1½) HEALTH BRIDGE-IN

Building on existing knowledge of registered nurses, this course provides opportunities for students to develop a health promotion perspective. The focus will be on theories and concepts related to health promotion, community, and family nursing. (Pre- or corequisite: 320; corequisite: 331) (Normally, program credit will not be granted for both 330 and 307) F(0-0-3)

### NURS 331 (1½) NURSING PRACTICE BRIDGE-IN

This clinical experience provides an opportunity for participants to work with families and community agencies. As part of the multidisciplinary team, participants will engage in community health programs with a primary health care focus. (Pre- or corequisite: 320; corequisite: 330) (Normally, program credit will not be granted for both 331 and 307) (Grading COM/F) F(3-6-0)

### NURS 340 (1½) PROFESSIONAL GROWTH: KNOWLEDGE DEVELOPMENT IN NURSING

This course focuses on concept development in nursing. For each concept studied, students will have an opportunity to think critically about relevant clinical research findings, theoretical formulations and data derived from expert practice. (Pre- or corequisite: 320) (Normally, program credit will not be granted for both 340 and 308) F(3-0)



**NURS 341 (1½) PROFESSIONAL GROWTH: NURSING INQUIRY**

In this course various modes of nursing inquiry will be addressed. Some of these include scientific, philosophical and historical modes. Relationships between practice, theory, and research will be explored. Past and present contributions to nursing knowledge will be discussed. (*Prerequisite*: Returning RNs — 340) (Normally, program credit will not be granted for both 341 and 407) S(3-0)

**NURS 350 (1½) HEALTH IV: HEALTH PROMOTION**

This course will integrate people's experiences with health and healing emphasizing a community focus. Societal responsibility for health will be examined from a health promotion perspective. National and international issues related to the role of nursing in health promotion will be explored. (*Prerequisite*: Returning RNs — 330, 331; Continuing Students — Health III. *Corequisite*: 351) (Normally, program credit will not be granted for both 350 and 415) S(3-0)

**NURS 351 (1½) NURSING PRACTICE V**

The focus of this clinical experience is on health promotion with an emphasis on community and multidisciplinary team work. Participants will have an opportunity to identify a health issue and implement a plan of action. (*Prerequisite*: Returning RNs — 330, 331; Continuing students — Nursing Practice IV. *Corequisite*: 350) (Normally, program credit will not be granted for both 351 and 415) (Grading: COM/F) S(3-0)

**NURS 352 (1½) SELF AND OTHERS III: HELPING RELATIONSHIPS**

The focus of this course is for students to develop a conceptual and experiential understanding of effective interpersonal relationships. Opportunities will be provided for students to become aware of their interpersonal style as it impacts on their relationships with clients and colleagues. Through integration of the principles of effective communication learners will participate in initiating, maintaining and bringing to closure caring interpersonal relationships. (*Prerequisite*: Returning RNs — 320 or permission of the Director or designate; Continuing Students — Self and Others II) (Normally, program credit will not be granted for both 352 and 309) S(3-0)

**NURS 360 (formerly 460) (1½) PROFESSIONAL GROWTH: RESEARCH**

The emphasis of this course is to enhance nurses' ability to work as scholars. Participants will experience ways to transform personal inquisitiveness into a process of posing, exploring and answering researchable nursing questions. Participants will experience ways to critically examine a range of research techniques and methods. (*Prerequisite*: 320) (Normally, program credit will not be granted for both 360 and 401) S(3-0)

**NURS 370 (3) CONSOLIDATED NURSING PRACTICE EXPERIENCE II**

This practice experience is designed for students from the community colleges who are continuing their B.S.N. program. Students will have opportunities to practice in institutional care facilities or community settings. Nursing practice experiences will consist of five week preceptorships. (*Prerequisite*: Students must normally complete all course work in Term 5) (In lieu of this course, students may complete a cooperative education option. Credit will not be given for both NURS 370 and Coop) (Grading: COM/F) K

**NURS 390 (1½ or 3) DIRECTED STUDIES**

Directed readings, research projects or special studies in a specified area of interest. A proposal is developed in consultation with a faculty member and includes a plan for the evaluation of the student's work. The proposal must receive the approval of the Director before students are permitted to register. (Offered as resources permit)

**NURS 401 (1½) NURSING RESEARCH**

The emphasis of this course will be to enhance nurses' ability to be reflective practitioners. Participants will experience ways to transform personal inquisitiveness into a process of posing, exploring and answering researchable nursing questions. Through praxis, participants will experience ways to critically examine a range of research techniques and methods. (Normally, program credit will not be granted for 401 and 460) NO(3-0)

**NURS 404 (1½) PROFESSIONAL ISSUES IN NURSING AND HEALTH CARE**

This course focuses on professional issues in nursing, including the role of individual nurses and the professional organizations in changing the health care delivery systems and in functioning with those systems. (Normally, program credit will not be granted for 404 and 430) NO(3-0)

**NURS 406 (formerly 303) (3) HEALTH SCIENCE**

The contributions of modern science and the scientific method to the understanding of various disease states are reviewed. Students will acquire the ability to analyze current literature in various areas of basic science relevant to clinical practice and will pursue in depth an area of special interest arising from their practice. (Restricted to students in the B.S.N. program or, with the permission of the Director or designate as space permits, to other students with a suitable background) NO(3-0)

**NURS 407 (3) NURSING INQUIRY**

In this course, various modes of nursing inquiry will be addressed. Some of these include scientific, philosophical, and historical modes. Relationships between practice, theory, and research will be explored. Past and present contributions to nursing knowledge will be discussed. (Restricted to students enrolled in the B.S.N. program or to those with the permission of the Director or designate) (Normally, program credit will not be granted for 407 and 341) NO(3-0)

**NURS 410 (3) COMMUNITY HEALTH NURSING THEORY**

This course focuses on theory and skills required for Community Health Nursing. Nursing theories and relevant concepts from public health and the social sciences form the basis for a population focused approach to nursing care. Emphasis is placed on the promotion of health and prevention of disease and disability in families and groups within the community. (Usually 410 and 411 are taken together) (Normally, program credit will not be granted for 410 and 415 or 480) (*Prerequisite*: 301, 302) NO(3-0)

**NURS 411 (3) COMMUNITY HEALTH NURSING PRACTICE**

In this course students practice the theory and skills of 410. Students work with field guides in a variety of community agencies to provide nursing care to families and groups in ways that consider course, student, agency and patient goals. Opportunities for both concurrent and block field experience are available. (Normally, program credit will not be granted for 411 and 415, 480.) (*Prerequisites*: 301 and 302. *Pre- or corequisite*: 410) (Grading: INP; lettergrade) NO(0-5-1)

**NURS 415 (3) POPULATION-BASED CLINICAL STUDIES**

This course focuses on theories and skills necessary for nursing care of defined populations. Opportunities will be provided for students to participate in primary health care in health-related agencies, applying principles of teaching/learning, and program development, implementation, and evaluation. (Normally, program credit will not be granted for 415 and 410, 411 or 350, 351) (*Prerequisite*: 306. *Pre- or corequisite*: 310 or permission of the Director or designate) NO(3-5-1)

**NURS 430 (1½) HEALTH/PROFESSIONAL GROWTH: NURSES INFLUENCING CHANGE**

This course will explore ways nurses can influence and create their future as professionals within the health care system. Emphasis will be placed on selected strategies for enhancing nursing influence. (*Prerequisite*: 350, 351; *corequisite*: 431) (Normally, program credit will not be granted for both 430 and 404) F(3-0)

**NURS 431 (1½) NURSING PRACTICE VI**

This clinical experience focuses on the actualization of the nurse as a professional. By critically reflecting on clinical experiences, participants will experience the significance of their role as generators and disseminators of nursing knowledge in shaping and responding to the challenges of health care in our society. (*Prerequisite*: 350, 351; *corequisite*: 430) (Grading: COM/F) F(0-6-3)



**NURS 450 (1½) NURSING MANAGEMENT**

This course is designed to provide an opportunity to explore concepts and issues in nursing management. The diverse and often conflicting roles of the nurse manager within the Canadian health care context will be examined. Knowledge and skills acquired through experience and/or other courses will serve as a basis for exploring the roles of today's nurse manager. (This course will be restricted to students in Nursing, and to students with at least third year standing in other professional programs with the permission of the Director of the School of Nursing or designate. Students may substitute SOCW 450 with the permission of the instructor of that course) *NO(3-0)*

**NURS 470 (3) CONSOLIDATED NURSING PRACTICE EXPERIENCE III**

Students will have opportunities to practice in institutional care facilities or community care settings during this nursing practice experience with a focus on community development. This nursing practice experience will consist of a five week preceptorship. (*Prerequisite:* Students must normally complete all course work in Term 6) (In lieu of this course, students may complete a cooperative education option. Credit will not be given for both NURS 470 and Coop) (Grading: COM/F) *S*

**NURS 475 (3) CONSOLIDATED NURSING PRACTICE EXPERIENCE IV**

Students will have access to a broader scope of opportunities for this nursing practice experience. Students will seek involvement in aspects of practice which highlight nurses' societal responsibility for health care. This nursing practice experience will consist of a five week preceptorship. (*Prerequisite:* Students must normally complete all course work in Term 7) (In lieu of this course, students may complete a cooperative education option. Credit will not be given for both NURS 475 and Coop) (Grading: COM/F) *S*

**NURS 480 (3) ADVANCED NURSING: PUBLIC HEALTH NURSING**

This course involves in-depth study and practice in the area of health promotion and primary prevention as it relates to public health nursing. Students meet weekly in a scheduled seminar to discuss practice issues of mutual interest. May be offered every other year, or annually as resources permit. Students are advised to consult the School before registering. (*Pre- or corequisite:* 415 or 430, 431 or permission of the Director or designate) *S(1-5-3)*

**NURS 481 (1½) ADVANCED NURSING: CLINICAL NURSING PRACTICE**

This course involves in depth study and practice in specialized clinical areas other than community health. Students may take two 1½ unit 481 areas to fulfill the required 3 units of the Advanced Nursing elective. Offerings will vary from year to year as resources permit. Each of the areas (1½ units each) listed below may be taken only once for credit.  
481A Gender Issues in Mental Health  
481B Introduction to Gerontological Nursing  
481C The Philosophy and Practice of Palliative Care  
481D Acute Care *K*

**NURS 482 (1½) ADVANCED NURSING: ADMINISTRATION OF NURSING PRACTICE**

This course involves application of management theory through a practicum in a service agency. Students will be placed with a field guide selected on the basis of the student's interest and background. Students work individually or in groups and will meet weekly in a scheduled seminar to discuss administrative issues of mutual concern. Students are advised to consult the School before registering. Offered as resources permit. (*Prerequisite:* 450 or permission of the Director or designate) *NO(0-5-1)*

**NURS 483 (1½) ADVANCED NURSING: TEACHING AND LEARNING**

This course provides students with opportunities to experience a variety of teaching-learning situations with patients, staff, peers or others and examine that experience using reflective analysis, discussion and the literature. Students will engage in an individually contracted practicum as part of the course. The course is presented within a humanistic philosophical framework which guides its process and teaching-learning strategies. (*Prerequisite:* 310 or 320 or permission of the Director or designate) *F(3-0)*

**NURS 484 (3) CROSS-CULTURAL CARING: A FOCUS ON ABORIGINAL HEALTH AND HUMAN SERVICE ISSUES**

The course is intended to help health and human service providers who work with First Nations clients to develop perspectives, understanding and approaches which will facilitate the provision of culturally sensitive and appropriate care. Learners will work with First Nations representatives and others to understand historically and culturally significant knowledge and events and to apply their knowledge in a relevant practicum experience. *NO(3-5-1)*

**NURS 485 (1½) COMPUTER APPLICATIONS IN NURSING**

This course is designed to facilitate the exploration of the impact of information technology in relation to the nursing profession. Course content focuses on computer applications and related issues in nursing practice, nursing administration, nursing education, and nursing research. (Previously cross-listed with HINF 385) (Credit will not be granted for both 485 and HINF 385) *S(3-0)*

**NURS 486 (3) ADVANCED NURSING: MENTAL HEALTH CHALLENGES IN LATER LIFE**

This course is designed to assist frontline professionals to work with older persons who experience mental health problems. Studies will include: stressors affecting emotional health in the elderly, mental health assessment, interventions useful in the management of problematic behaviours in the elderly, environmental strategies for increasing functioning in older people, and community resources for meeting mental health needs. The course will provide multiple opportunities to apply theory in practice and to develop attitudes conducive to effecting positive changes in the workplace. *K(3-5-1)*

**NURS 487 (1½) HEALTH CARE LAW**

This course is designed to allow the students to develop an understanding of the origin and sources of the law as it applies to the Canadian health care system. It will stimulate an appreciation for legal terminology, reasoning, and processes as well as the basic principles of law which apply to and govern the delivery of health care services in Canada. The course is also designed to develop an ability to identify the legal aspects of health care practice, information systems and management as well as an ability to determine when and how to use legal counsel effectively. (*Prerequisite:* 320 or permission of the Director or designate) (Normally, program credit will not be granted for both 487 and HINF 491 — Health Care Law) *FK*

**NURS 490 (1½ or 3) DIRECTED STUDIES**

Directed readings, research projects or special studies in a specified area of interest. A proposal is developed in consultation with a faculty member and includes a plan for the evaluation of the student's work. The proposal must receive the approval of the Director before students are permitted to register. (Offered as resources permit)

**NURS 491 (1½ - 4½) NURSING PRACTICE: SELECTED CONCENTRATIONS**

This course provides a nursing practice experience in a specific area of concentration. This nursing practice experience is designed to actualize the concept of praxis and to provide students with opportunities to learn more about specific clinical or functional areas. This course may be taken in 1½ unit increments or as a 4½ unit concentrated focus. (*Prerequisite:* Completion of Term 7 of collaborative program. *Corequisite:* 492 or permission of Director or designate) (Grading: COM/F) *SK*

**NURS 492 (1½ or 3) NURSING THEORY: SELECTED CONCENTRATIONS**

This course provides opportunities for students to explore the conceptual understandings for nursing practice in a specific area that they choose as an area of concentration. Students may take two 1½ unit 492 offerings in different but related areas to fulfil the 3 unit requirement for classroom study in their area of concentration. (*Prerequisite:* Completion of Term 7 of collaborative program. *Corequisite:* 491 or permission of the Director or designate) *SK*



## SCHOOL OF PUBLIC ADMINISTRATION

- James J. McRae, B.A. (U. of Vic.), M.A., Ph.D. (W. Ont.), Professor and Director of the School
- Robert L. Bish, A.B. (S. Calif.), A.M., Ph.D. (Indiana), Professor
- J. Barton Cunningham, B.A. (Brigham Young), M.P.A., Ph.D. (S. Calif.), Professor
- James Cutt, M.A. (Edin.), M.A., Ph.D. (Tor.), Professor
- A. Rodney Dobell, B.A., M.A. (Brit. Col.), Ph.D. (M.I.T.), Professor (Francis Winspear Chair in Public Policy)
- Ralph W. Huenemann, B.A. (Oberlin), M.A., Ph.D. (Harv.), Professor of Economic Relations with China
- John J. Jackson, M.Sc. (Ott.), Ph.D. (Alta.), Professor
- John Langford, B.A. (Car.), M.A. (Oxon.), Ph.D. (McG.), Professor
- James N. MacGregor, M.A. (Glas.), M.Sc., Ph.D. (U. of Vic.), Professor
- James C. McDavid, B.A., M.A. (Alta.), M.A., Ph.D. (Indiana), Professor
- Hartmut J. Will, Dipl.-Kfm (F.U., Berlin), Ph.D. (Ill.), Professor
- Frank Cassidy, B.B.A. (C.C.N.Y.), M.A., Ph.D. (Stan.), Associate Professor
- Genevieve Eden, B.A., M.I.R., Ph.D. (Tor.), Associate Professor
- Thomas A. Lambe, B.A.Sc. (Brit. Col.) M.S., Ph.D. (Stan.), Associate Professor
- Lorne M.J. Borody, B.A. (Winn.), Administrative Officer
- Trudy Hadley, Continuing Studies Program Coordinator
- Heather A. Kirkham, B.A. (Leth.), Continuing Studies Program Director
- Mark K. Loken, B.A. (Conc. Coll.), M.A. (Calg.), Ph.D. (Duke), Cooperative Education Coordinator
- Sylvia D. Scow, B.A. (U. of Vic.), Program Administrator, Aboriginal Program
- Visiting, Adjunct and Cross-listed Appointments:**
- John L. Fryer, B.Sc. (Lond.), M.A. (Pitt.), Visiting Professor (1994-97)
- Thomas K. Shoyama, B.A., B.Comm. (Brit. Col.), Visiting Professor (1994-95)
- Richard H. Mimick, B.S.B.A. (Creighton), M.B.A. (Nebraska), Visiting Associate Professor (1995-96)
- Laurie Jackson, B.Sc., M.Ed. (Alta.), Visiting Assistant Professor (1994-97)
- Newman Lam, B.Comm. (Brit. Col.), M.P.A., Ph.D. (U. of Vic.), Visiting Assistant Professor (1995-96)

### GRADUATE PROGRAMS

For information on studies leading to the M.P.A. Degree, see page 358.

### UNDERGRADUATE PROGRAM

#### DIPLOMA PROGRAM IN PUBLIC SECTOR MANAGEMENT

The School of Public Administration offers a part time off campus program of studies leading to the Diploma in Public Sector Management which is available at a number of regional centres in the province. The diploma will be awarded upon successful completion of 18 units of course work with an overall grade point average of at least 2.00. The program is intended for practising or prospective managers in the public sector who wish to acquire the skills and background necessary for effective and responsible management, and who are interested in broadening their understanding of the administrative process.

#### Admission:

Courses will be taught at a level which is consistent with other third and fourth year undergraduate courses offered at the University of Victoria, and applicants will be required to demonstrate that they possess the academic proficiency necessary to benefit fully from the program. Students without a bachelor's degree will normally be expected to have the equivalent of at least the first two years of university obtained from institutions such as BCIT, the Community Colleges, or other recognized professional associations. Candidates without formal post-secondary qualifications but with demonstrable experience at senior levels of responsibility may be admitted as conditional students, with continuation in the program subject to performance in the first two to three courses with a grade of C+ or better. In addition to academic background, all applicants should have had a minimum of three years

experience in dealing with issues characteristic of the public sector. A limited number of students not formally admitted to the program may register for individual courses, with the permission of the Director of the School of Public Administration. Students should check which courses are being offered at the regional centre nearest them. Inquiries about the program should be forwarded to: The Director, School of Public Administration, University of Victoria, Box 1700, Victoria, B.C. V8W 2Y2.

#### Program of Studies:

The Diploma Program in Public Sector Management will be available on a decentralized part time study basis. Students will, therefore, be limited in their choice of courses to what is being offered in the centre nearest them. Completion of the 18 units will normally take three to four years, although some courses will be run as intensive summer institutes in residence at the University of Victoria, which will accelerate progress towards the diploma.

Students may be permitted to complete up to 4½ units of credit towards the Diploma in Public Sector Management by taking appropriate courses offered through other departments of the University of Victoria or at other universities. Prior approval must be obtained from the Director of the School of Public Administration.

Students may be granted approval to exceed 4½ units of transfer credit in cases where the credit has been (or will be) obtained for graduate level courses taught through the School of Public Administration at the University.

A typical program of studies would include:

4½ units: Core courses (310, 311, 312) and the remaining 13½ units from the following areas as appropriate to the students' needs and interests:

Social/Applied sciences (313, 314, 406)  
Managerial theory (420, 421, 422, 424, 425, 431, 437, 451)  
Policy areas (410, 423, 445, 448, 452, 465, 466, 470, 490, other courses to be developed in the future dealing with health administration, human services administration, environment, transportation, etc.)

The program includes a Local Government Option. Completion of four courses (ADMN 312, 445, 452, and 465) has been identified by the Provincial Board of Examiners, in consultation with the Municipal Officers' Association of B.C., as a mandatory educational requirement for the following certificates:

- Senior Certificate in Municipal Administration
- General Certificate in Municipal Management
- Advanced Certificate in Municipal Management

With these courses, in combination with other educational qualifications and relevant work experience in local government in British Columbia at a senior administrative level, local government employees may apply to the Board of Examiners for certification.

For further certification information contact: Secretary, Board of Examiners, Min. of Municipal Affairs, Recreation & Culture, Parliament Buildings, Victoria, B.C. V8V 1X4, telephone (604) 387-4053. For further MOA Education Program information contact: Executive Director, Municipal Officers' Association of B.C., Suite 200, 880 Douglas Street, Victoria, B.C. V8W 2B7, telephone (604) 383-7032.

### CERTIFICATE PROGRAM IN THE ADMINISTRATION OF ABORIGINAL GOVERNMENTS

The School of Public Administration offers a unique part time university credit program of studies leading to a Certificate in the Administration of Aboriginal Governments. The program consists of eight courses, seven of which are required. The courses focus on critical topics such as communicating, organizing and managing in aboriginal governments as well as the legal, political, economic and public policy dimensions of these governments.

This university credit program is designed for people who want to learn more about aboriginal governments. It should be of special interest to people who work in or direct aboriginal governments and organizations. Individuals may take particular courses, although enrolment by students who are not formally admitted to the program will be limited. For those students who also are granted admission to the School's Diploma in Public Sector Management (DPSM) program, all courses are also eligible for credit towards the Diploma.



**ADMISSION:**

Successful applicants will be expected to meet the University English requirements and have completed Grade 12. Mature applicants will be considered, as detailed in University policy. Courses will be taught at a level which is consistent with other third and fourth year undergraduate courses offered at the University of Victoria, and applicants will be required to demonstrate that they possess the academic proficiency necessary to benefit fully from the program. Candidates without formal post-secondary qualifications but with demonstrable experience may be admitted, with continuation in the program subject to performance in the first two to three courses with a grade of C+ or better. A limited number of students not formally admitted to the program may register for individual courses, with the permission of the Director of the Program.

Inquiries about the program should be forwarded to: The Director, Administration of Aboriginal Governments Program, School of Public Administration, University of Victoria, Box 1700, Victoria, B.C. V8V 2Y2.

**APPLICATION TO THE PROGRAM:**

The application deadline is May 1. Classes start in September and there are no new admissions after that until those that are granted for the next September term. All applicants are notified about the status of their application by July 1.

Applicants are required to submit:

- completed application forms;
- two official transcripts of any previous university and college work;
- a resume outlining work experience;
- a typed letter of one to three pages in length indicating relevant personal background and reasons for enrolling in the program;
- a letter from the employer, if there is one, indicating the employer's support for the student's participation in the program and the understanding of the obligations involved, with particular reference to the time required;
- and, two references on forms supplied by the University, from employers or persons who know the applicant well. References from relatives are not acceptable.

An interview after all documentation has been received may be required, although the applicant's geographic distance from the campus will be taken into consideration.

The School of Public Administration works actively with students to help secure necessary financial assistance. Students and employers are advised to consult with the School regarding scholarships and funding from the federal and provincial governments.

**PROGRAM OF STUDIES:**

All courses in the program are offered on the University's campus. To accommodate students coming from out of the Victoria area, courses are designed so that students may come to Victoria for a series of one or more concentrated, multiple-day seminars. There are also reading and assignments between classes.

Students need seven required courses and one elective in order to obtain a certificate.

The elective may be chosen from:

- Approved university transfer courses or University of Victoria courses in English, the social sciences, business administration or a related field.
- Approved credit courses in the School's Diploma in Public Sector Management program.
- ADMIN 384 (Emerging Policy Issues in Aboriginal Governments) and/or ADMIN 385 (Economy, Society and Aboriginal Governance).

All students are required to take ADMIN 380 and ADMIN 381 to begin their program. Students may write a challenge examination for Admin 380 and if they pass, they can be excused from this requirement. An approved elective will be required in such instances. The only courses that have prerequisites are ADMIN 380 and 381. Completion of the 12 units can take from 16 to 24 months.

As they work their way through the program, students are provided with a comprehensive range of support services, including: Personal, academic and career counselling

- Tutoring
- Teleconferencing between classes
- Student support networks

Throughout the program considerable attention is paid to further developing student's written and oral communication skills. Liaison is maintained with students' employers, when required.

**DESCRIPTION OF COURSES:**

Each course features carefully developed materials especially designed for it. In most cases, teleconferencing is also used to facilitate home study between seminars. The required credit courses are:

**ADMN 380 (1½) — WRITTEN COMMUNICATIONS IN ABORIGINAL ORGANIZATIONS**

This course will focus on the development of the written communications skills that contribute to effective performance in aboriginal organizations. Written assignments will be designed to improve the student's ability to communicate clearly, organize material and present arguments. A focus will be placed on the developments of good grammar and prose style, with a concentration on the preparation of briefs, the drafting of resolutions, reports, discussion papers, business letters, memoranda, workshop presentations, and press releases. The unique challenges of working in aboriginal organizations and communities will inform the effort throughout. (No prerequisite)

**ADMN 381 (1½) — ORGANIZING AND ABORIGINAL ORGANIZATIONS**

This course will consider the dynamics of organizing as an activity in and with aboriginal organizations. An emphasis will be placed on organizing processes, goals, structures, culture, power, leadership, strategic decision-making, effectiveness, and change as well as the organizing skills and values that need to be developed for aboriginal organizations, governments and communities to achieve fuller self-determination. The role of aboriginal culture and traditions will be explored throughout as will the contemporary development of the organizations of aboriginal peoples in Canada. (No prerequisite)

**ADMN 382 (1½) — LAW AND ABORIGINAL GOVERNMENTS IN CANADA**

This course will examine laws relevant to Aboriginal governments in Canada. It will examine the authorities of and legal relationships between Aboriginal, Band, federal and provincial governments. It will include an examination of aboriginal (customary) laws, international, constitutional, statutory and common law pertinent to aboriginal governments. Special attention will be given to emerging concepts in the development of law on aboriginal title, aboriginal rights, treaty rights, treaty and land claims negotiations. As well the course will focus on laws relevant to the day to day operations of aboriginal and/or Band governments. (Prerequisites: ADMN 380 and 381)

**ADMN 383 (1½) — ABORIGINAL GOVERNMENTS AND CANADIAN GOVERNMENT**

This course will consider the traditional nature and contemporary evolution of aboriginal governments, with special emphasis on British Columbia and the dynamics of the Canadian federal system. Topics to be covered will include the movement for self-government, the constitutional process, citizenship, the jurisdiction and financing of aboriginal governments, the Indian Act, service provision by these governments and the Canadian political process, as it relates to and is affected by aboriginal governments. (Prerequisites: ADMN 380 and 381)

**ADMN 448 (1½) PROPERTY TAX POLICY AND ADMINISTRATION**

An examination of property value determination, assessment theory and practice, assessment rolls, appeal processes, rate determination, tax incidence and effects, collection, enforcement, tax-service relationships and alternative revenue sources for municipalities and First Nations. The course is designed to cover taxation by First Nation governments as well as other governments.



**ADMN 480 (1½) — MANAGING WITH PEOPLE IN ABORIGINAL ORGANIZATIONS**

This course will focus on the skills and understanding that managers in aboriginal organizations need to work with people to attain effective performance. Topics will include the basic principles of human resource management, labour relations, motivation, job design, performance appraisal, group dynamics, negotiating, time management, conflict management and managerial training and development. Special emphasis will be placed upon the relevance of the cultural traditions and values of aboriginal peoples. (*Prerequisites:* ADMN 380 and 381)

**ADMN 481 (1½) — MANAGING SYSTEMS IN ABORIGINAL ORGANIZATIONS**

This course will provide the student with an opportunity to further enhance the skills and understandings necessary to develop and operate various systems and programs in aboriginal organizations effectively. Topics will include the basic principles of planning, financial management, accounting, budgeting, information systems, evaluation, project and program development. Special emphasis will be placed upon the relevance of the cultural traditions and values of aboriginal peoples. (*Prerequisites:* ADMN 380 and 381)

**ADMN 482 (1½) — STRATEGIC COMMUNICATIONS IN ABORIGINAL GOVERNMENTS**

This course will provide students with the understanding and skills necessary for effectively managing organizational communications. A focus will be placed on the development of oral and written communications skills in relation to the media, strategies for organizational communications and promotion, the evaluation of communication efforts and the practical implications of good communications practices for administrators. The unique challenges and roles of strategic communications in aboriginal organizations will inform course content throughout. (*Prerequisites:* ADMN 380 and 381)

Two program electives are offered in alternating years:

**ADMN 384 (1½) — EMERGING POLICY ISSUES IN ABORIGINAL GOVERNMENTS**

This course will provide students with an opportunity to explore a selection of the more critical policy issues which characterize and affect aboriginal governments. Special attention will be paid to policy analysis skills, the public policy development process and the international experiences of aboriginal peoples and their governments. (*Prerequisites:* ADMN 380 and 381 or permission of Program Director)

**ADMN 385 (1½) — ECONOMY, SOCIETY AND ABORIGINAL GOVERNANCE**

This course will focus on the economic and social contexts of aboriginal governments in Canada. Matters covered may include the role and importance of land in aboriginal society, resource management, the contemporary socio-economic conditions of aboriginal peoples and their communities, the particular challenges aboriginal peoples encounter in urban settings and the dynamics of economic development. Particular attention will be paid to the historical and cultural dimensions of the subject. (*Prerequisites:* ADMN 380 and 381 or permission of Program Director)

More detailed information and the relevant forms may be obtained by contacting the Director, Administration of Aboriginal Governments Program, at the School of Public Administration.

**UNDERGRADUATE COURSES****ADMN 310 (formerly 403) (1½) PUBLIC SECTOR APPLICATIONS OF MICROECONOMIC ANALYSIS**

An introduction to the principles of microeconomics as they apply to public sector policy analysis and management. The course begins with a focus on how social coordination occurs through markets and proceeds with applications to aid decision making. Topics include government regulation of business, income determination and policies, pollution control, fisheries, government finance and the use of benefit-cost analysis. The course is designed to illustrate the usefulness of microeconomic analysis for public sector policy analysts and managers at all levels of government. (Not open for credit to students who have taken or are taking ECON 201)

**ADMN 311 (HSD 404) (1½) THE POLITICAL AND GOVERNMENT ENVIRONMENT**

An exploration of the political and governmental institutions and processes within which public administrators and health and social services professionals work. Topics to be examined include political parties, pressure groups, public participation, the media, courts, the charter of rights, legislative bodies, the political executive, central agencies, ministries, departments, crown corporations, regulatory agencies, quasi-governmental service delivery agencies, and intergovernmental relations. The course is designed for public servants and health and social service professionals at all levels of government and administrators in quasi-governmental agencies. (Credit will not be given for both 311 and HSD 404, or for both 311 and 504)

**ADMIN 312 (1½) PRINCIPLES OF ADMINISTRATION: CONCEPTS AND PROCESS**

An investigation of the process of administration, the sequence and cycle of events that are integral to this process. In particular, the key processes of planning, organizing, implementing and evaluating will be examined.

**ADMN 313 (formerly 400) (1½) QUANTITATIVE ANALYSIS**

The course provides an introduction to quantitative analysis and the use of related software tools. The main focus of the course is on the application of basic algebra to the analysis of financial decisions, including elementary cost-benefit analysis. An introduction is provided to the use of computerized spreadsheets in relative applications.

**ADMN 314 (1½) RESEARCH METHODS IN THE PUBLIC SECTOR**

An introduction to research methods in public sector settings to enable students to become informed consumers and critics of research-based information and more effective managers of research-related projects. Topics include: definition and types of research; research design; measurement; methods of data collection; data coding; descriptive statistics, sampling and inferential statistics; relationships between variables, ethical and organizational issues; the research proposal and report.

**ADMN 406 (1½) ORGANIZATIONAL ANALYSIS**

An introduction to theories of individual and group behaviour in the context of complex social systems. Topics will include: the history of organization and management theory; concepts of socialization, leadership, communication, conflict, decision making, and motivation.

**ADMN 410 (1½) (formerly 300) THE IMPACT OF GOVERNMENT**

An introduction to the costs, benefits, and rationale behind the growth of government involvement in society. Topics will include: government intervention in the allocation of resources, stabilization policies, the impact of government on the capital markets, the 'make or buy' dilemma in government procurement; government regulatory activity, the means for determining public choice, and the social effects of welfare and environment policy.

**ADMN 420 (1½) THE PUBLIC POLICY PROCESS**

An introduction to the policy process as it is analysed in modern theoretical literature, and as it may be examined through case studies from Canadian and non-Canadian contexts. Topics will include: policy formulation, the structural aspects of policy execution, and the human dimension of implementation and coordination.

**ADMN 421 (1½) BUDGETING AND MANAGEMENT SYSTEMS**

The focus of this course will be on the use of budgeting systems in the planning and control function of management. Topics will include phases of the financial management cycle, including forecasting and needs analysis; budgeting, internal control, evaluation, and audit. Institutional structures and operating procedures which govern the allocation and expenditure of government funds will also be examined.

**ADMN 422 (1½) THE RESPONSIBLE PUBLIC SERVANT**

Is it acceptable for a public servant to blow the whistle? Should a public servant be able to moonlight? Should public servants feel obligated to restrict their political rights? To what levels of risk should public servants expose members of the public? This course provides a practical examination of the arguments that are made on both — or many — sides of these and other difficult value questions currently confronting public servants and considers institutional means and techniques which can be used to strengthen and encourage responsible public service. (Credit will not be given for both 422 and 519)



**ADMN 423 (1½) LOCAL GOVERNMENT**

Analysis of the legislative framework, organization, operation and finance of local government in British Columbia. (Credit will not be given for both 423 and 545)

**ADMN 424 (1½) MANAGEMENT INFORMATION SYSTEMS**

A review of data and information processing concepts and procedures, with consideration of the costs and benefits of different information systems which can be developed to meet the informational needs of public sector managers for functions such as planning, budgeting, control and evaluation. (Credit will not be given for both 424 and 524)

**ADMN 425 (1½) LABOUR RELATIONS IN THE PUBLIC SECTOR**

An examination of the development and functioning of collective bargaining in the provincial public service. Special attention will be given to the legislation regulating bargaining, the institutions that do the bargaining, determination of bargaining units, exclusions, bargainable issues, content of collective agreements, arbitration, and dispute resolution. (Credit will not be given for both 425 and 525)

**ADMN 431 (1½) PERSONNEL MANAGEMENT IN THE PUBLIC SECTOR**

The course will examine various aspects of the personnel function within government, and will compare current theory and practice in such areas as: human resource planning, recruitment, and selection; performance evaluation, compensation, benefits, and promotion; career planning, and staff development; labour relations, discipline, and control structures. Considerable emphasis will be placed on the detailed analysis of the relevant legislation. (Credit will not be given for 431 and 531)

**ADMN 437 (1½) PUBLIC SECTOR PROGRAM EVALUATION**

An introduction to the organizational, methodological and conceptual issues that are involved in understanding how programs are evaluated. The course will focus on developing a practical understanding of the range of program evaluations conducted in the public sector. Attention is paid to effectiveness evaluation techniques as well as benefit cost applications to evaluations. (Credit will not be given for both 437 and 537)

**ADMN 445 (1½) URBAN AND REGIONAL ECONOMICS**

Analysis of economic forces which influence spatial patterns and the relationship between spatial patterns, public services, land use planning and land use control processes. (Prerequisites: 310 or equivalent, or ECON 201)

**ADMN 451 (1½) ADMINISTRATIVE LAW**

An introduction to the principles of administrative law, paying particular attention to the relationship between the administrator and the public. Issues such as the requirement of fairness and natural justice in decisions affecting the public, appeals from administrative decisions, public participation in the decision making process, and political accountability and control of boards and independent agencies will be discussed. (Credit will not be given for both 451 and 551)

**ADMN 452 (1½) LOCAL GOVERNMENT LAW**

Analysis of legislation, regulations and court decisions within which local governments in B.C. function. The presentation is designed to make nonlawyers familiar with local government law and legal processes as they apply to local government activities. (Prerequisite: 451 or equivalent)

**ADMN 465 (1½) LOCAL GOVERNMENT POLICY**

An integrated analysis of selected local government problems drawing on urban and regional economics, local government law and the understanding of local government structure and operations. Topics selected for examination will vary. (Prerequisites: 423 or equivalent, 445, 452)

**ADMN 466 (1½) PROVINCIAL GOVERNMENT POLICY AND ADMINISTRATION**

An examination of the legislative structure, cabinet committees, ministries, central agencies, and Crown corporations of the B.C. Government. Attention will be focused on the major government programs, and the administrative processes underlying the formation of public policy as well as the management systems employed in the implementation and evaluation of government programs.

**ADMN 470 (1½-3) CONTEMPORARY TOPICS IN ADMINISTRATION**

A study of selected topics drawn from the current literature and practices in Public Administration or related fields. Students may be permitted to enroll in 470 more than once for credit, provided the course content is different from that previously taken.

**ADMN 490 (1½) DIRECTED STUDIES**

Directed reading and/or a research project under the supervision of a Faculty Member. (Open to students only with the permission of the Director)

## SCHOOL OF SOCIAL WORK

Barbara Whittington, B.A., M.S.W. (Brit. Col.), Associate Professor and Director of the School  
 Andrew Farquharson, B.A. (Bishop's), M.S.W. (McG.), M.Ed., Ed.D. (Tor.), Professor  
 Andrew Armitage, B.Sc. (Lond.), B.A. (Cantab.), M.S.W. (Brit. Col.), Ph.D. (Brist.), Associate Professor  
 Marilyn J. Callahan, B.A., B.S.W., M.S.W. (Brit. Col.), Associate Professor  
 John Cossom, B.A. (W. Ont.), B.S.W., M.S.W. (Tor.), Associate Professor  
 David T. Turner, LL.B. (Sheff.), Dip. S.W. & Admin. (Oxon.), Associate Professor  
 Kathleen Absolon, B.A. (Wat.), M.S.W. (W. Laur.), Assistant Professor  
 Leslie Brown, B.S.W. (Regina), M.P.A. (U. of Vic.), Assistant Professor  
 Marjorie D. Martin, B.A., B.S.W., M.S.W. (Brit. Col.), Assistant Professor  
 Elizabeth D. Pittaway, B.S.W. (W. Ont.), M.S.W., D.S.W. (W. Laur.), Assistant Professor  
 Joan Feyrer, B.A. (U. of Vic.), B.S.W. (Brit. Col.), Program Assistant  
 Marilyn Henigman, B.A. (S. Fraser), B.S.W. (Brit. Col.), M.P.A. (U. of Vic.) Program Assistant  
 Dora Leigh Bjornson, Continuing Studies Program Coordinator  
 Diana Ellis, Administrative Officer  
 Walene Whitaker, B.A., M.S.W. (Brit. Col.) Practica/Admissions Coordinator

**Visiting, Adjunct and Cross-listed Appointments:**

Brian Wharf, B.A., B.S.W., M.S.W. (Brit. Col.), Ph.D. (Brandeis), Professor (Human and Social Development Interdisciplinary Programs) (1991-95)  
 Fanda Y. Bender, B.A. (Calif., L.A.), M.S.W. (Calg.), Visiting Assistant Professor (1994-95)  
 Rheal Brant-Hall, B.S.W. (U. of Vic.), Adjunct Assistant Professor (1994-95)  
 Lynn Keffer, B.S.W. (McM.), M.S.W. (Brit. Col.), Visiting Assistant Professor (1993-95)  
 Alvin Lander, B.S.W., M.S.W. (Calg.), Ph.D. (Tor.), Adjunct Assistant Professor (1994-95)  
 Cheryl Moir van Iersel, B.S.W. (Calg.), M.S.W. (Brit. Col.), Visiting Assistant Professor (1993-95)  
 Audrey Sampson, Adjunct Assistant Professor (1994-95)  
 Bernice Squakin, B.S.W. (U. of Vic.), M.A. (Lids/Bastier), Adjunct Assistant Professor (1994-95)  
 Roberta Taylor, B.S.W., M.S.W. (U. of Vic.), Visiting Assistant Professor (1994-95)  
 Rosalee J. Tizya, Visiting Assistant Professor (1995-97)

## BACHELOR OF SOCIAL WORK PROGRAM

The School of Social Work offers a program of studies leading to the degree of Bachelor of Social Work (B.S.W.) that is fully accredited by



the Canadian Association of Schools of Social Work. Graduates are employed in a wide range of government and voluntary organizations such as family and children's services, hospitals, women's services, corrections, and First Nations social services.

### Mission

The School of Social Work is committed to empowerment based on equity, community change and adult education principles. The B.S.W. curriculum stresses an analysis of power differences related to gender, age, race, ethnicity, religion, class, abilities and sexual orientation. The School is developing a curriculum focus on structural, feminist and First Nations analyses. The goal is to develop critically reflective generalist social work practitioners, who are able to assess and respond to human problems at both an individual and a social, structural level.

It also seeks to provide accessible and flexible social work education to students who might otherwise be unable to obtain a B.S.W. degree because of family responsibilities, cultural differences, work, poverty, disabilities or geographic isolation.

To meet their commitment to the above principles, faculty, staff and students endeavour to create a learning environment that promotes respect, responsibility, curiosity, collaboration, flexibility, risk taking, creativity and lifelong learning.

### Ways to Access the B.S.W. Program

The range of approaches to obtain a University of Victoria B.S.W. degree includes: campus based courses in regular winter session, distance learning, on-campus summer studies, and decentralized face-to-face education. Distance learning is delivered in cooperation with the Division of Continuing Studies. Where feasible, students may complete a field placement in the geographic area of their choice within B.C.

Through the B.C. government ACCESS initiative, a full program of University of Victoria B.S.W. courses is also offered on a collaborative basis through two designated community colleges; University College of the Cariboo (Kamloops) and Okanagan University College (Kelowna). Students wishing to register for either of these B.S.W. programs should contact the college directly. (Note: Special rules apply to college transfer courses. University of Victoria B.S.W. students interested in taking college courses as part of their program should contact the School of Social Work.)

### First Nations Off-campus Programs

At the request of First Nations peoples, the School seeks to offer decentralized programs for First Nations with the goal of facilitating community ownership and self-government. These programs have established their own distinct mission statements.

Currently, the School is cooperating with the Northwest Band Social Work Association to deliver B.S.W. programming in Terrace for First Nations students. Enquiries concerning this program may be directed to Barbara Barnswell, Program Coordinator, Northwest Band Social Work Association, P.O. Box 187, Terrace, B.C. V8G 4A6.

An agreement establishing B.S.W. delivery is also in place with the Nicola Valley Institute of Technology (NVIT), in Merritt, B.C., which is governed by the five First Nations of Nicola Valley. All B.S.W. courses are offered at the Institute. Enquiries may be directed to Bernice Squakin, Department Head, NVIT, Box 399, Merritt, B.C. V0K 2B0.

The degree requirements for the First Nations off campus programs are identical to those for on campus (60 units including required courses). First Nations students may, however, be conditionally admitted to the off-campus programs with a minimum of one year (12 units) of transferable Arts and Science course credit, which includes SW 200A and SW 200B or equivalents. A further 18 units of transferable general Arts and Science courses are then completed during or after Social Work required courses. Students from the on campus or distance programs who want to take social work courses from the First Nations off campus programs require the approval of those programs and the U.Vic. School of Social Work.

Admission recommendations are based on (1) personal suitability as determined by First Nations interview panels established by the programs; and (2) academic eligibility as determined by the University.

The School works to ensure that its various approaches to education are equal in quality and that one admission process and set of standards applies to the B.S.W. program.

## ADMISSION REQUIREMENTS

Admission to this program requires completion of the first two years (30 units) of an undergraduate program at the University of Victoria with an overall average of at least 3.50 or better, or the equivalent at another university or a community college. This will normally include 3 units of English.

The precise number admitted will depend on the resources available to the School and the number of qualified applicants. Preference will be given to students who have gained experience in the social services field on a paid or volunteer basis. An initial screening for admission will be based on grades, an Experience Summary and a Personal Statement. Applicants selected through this initial screening process will then be interviewed, as a final selection process.

Students who have completed a human services training program at a college may be eligible to receive discretionary credit from the School. This is normally 6 units for each year of the program.

Admitted students can take most of their B.S.W. Program through Distance Education. However, SOC W 300 (or SOC W 303 and SOC W 352) are required to be taken face to face. These courses are currently offered on campus in summer session only.

All students are required to complete Social Work 200A and 200B or their equivalents as prerequisites for entry into the 3rd year.

Application packages are available at the School at the beginning of December each year.

Deadline for return of all application materials is January 31, each year.

Returning students who are in or who have already completed second year at the University of Victoria must make an application for entry into the B.S.W. program to Records Services by February 28.

## PROGRAM REQUIREMENTS

1. Candidates for the B.S.W. degree must comply with the minimum degree requirements for a Bachelor's degree outlined on page 22 of this Calendar. Particular attention is drawn to the English requirement for undergraduates as set forth on page 15 of the Calendar.
2. Students admitted to the B.S.W. program with a baccalaureate degree will be granted exemption from the requirement of 3 units of electives in the third and fourth years.
3. Students admitted to the School with a baccalaureate degree in a human service profession which includes a practicum component may be granted credit in up to 6 units at the discretion of the Director of the School and the Dean of the Faculty.
4. Completion of the B.S.W. degree requires 60 units of study as outlined below.
5. Students in the School of Social Work must maintain a sessional grade point average of 3.50 in both third and fourth years, otherwise they may be required to withdraw from the School.
6. Students are referred to page 256 of the Calendar for regulations concerning practica. The School requires that students adhere to the BCASW Code of Ethics.
7. Students should be aware that two practica are required in order to complete the course of study for a B.S.W. Practica agencies may request a criminal record check as part of their screening process. Students may be required to complete their practica in an agency requiring a criminal record check.

### First and Second Year:

Social Work 200A and 200B are required for entry into the B.S.W. program and are normally taken in second year. 200A and 200B are open to any student who has completed first year satisfactorily and carries credit in the Faculty of Arts and Science as a free elective only.

Students meeting all requirements for admission except Social Work 200A and 200B can apply for "conditional admission" to the School and enroll in these two courses in Summer Studies, through Continuing Studies.

A 1½ unit introductory data analysis course is a requirement for the completion of the degree. HSD 425, STAT 255, and 260, SOCI 371, PSYC 300A or ECON 245 are possible courses. Students planning on taking HSD 425 are advised to take SOC W 401 as a prior or concurrent registration unless they have taken a social science research methods course earlier in their university studies.

Other courses or their equivalents which are recommended to students considering admission to the school are:



ANTH 100A, 100B, 200A, 200B  
 BIOL 101  
 COM 205, 220  
 CYC 200A, 200B, 201  
 C SC 100  
 ECON 100, 201, 202, 245  
 ENGL 115, 116, 121, 122, 215, 225, 250  
 GEOG 101A, 101B, 211, 214, 215  
 HIST 105, 130, 234, 260  
 PHIL 100, 201, 203, 211, 214, 220, 233, 235, 269  
 POLI 100, 202, 220, 230, 250  
 PSYC 100A, 100B, 210, 250  
 SOCI 100, 103, 202, 210, 211  
 STAT 255, 260  
 THEA 150  
 WS 200A, 200B

(Second year students wishing to take upper level courses should consult with the appropriate department and the courses listed under Third and Fourth Year.)

### Third and Fourth Year:

In the third year students will take 300 (or 303 and 352), 304, 350A, 354, and a 1½ unit elective course chosen in consultation with the Director or designate (unless special permission is received from the Director to omit a course or courses from this group). For students unable to register in SOC W 300, concurrent registration in SOC W 303 and 352 is normally required unless permission to register for one of these courses is given by the Director. Total units: 15.

In the fourth year students will take 401, 402, 403, one of 450 or 476 and 3 units of third or fourth year social work electives, and a 1.5 elective chosen in consultation with the Director or designate (unless special permission is received from the Director or designate to omit a course or courses from this group). Total units: 15. A minimum of 27 units must be third and fourth year Social Work or HSD courses (HSD 401 and 460 are also acceptable as part of the 27 required units).

Total units for Third Year and Fourth Year: 30.

Recommended third and fourth year electives include any of the above-listed recommended first and second year courses and the following third and fourth year courses or their equivalents:

ADMN 311, 380, 381, 382, 383, 384, 385, 406, 420, 422, 466, 481, 482  
 ANTH 300A, 300B, 300C, 322, 335, 336, 339A, 399B, 401, 406, 418, 419  
 CYC 301, 460  
 COM 300, 310  
 ECON 300, 301, 315, 317, 321, 325, 326, 410A, 410B, 429  
 ED-B 336, 436, 437, ED-D 316, 317, 414, 417, 435A, 435B  
 ENGL 400, 403  
 ES 300A, 300B, 314, 377, 412, 420  
 HSD 401, 425, 460  
 GEOG 346, 347A, 358C, 443, 445, 448, 449  
 HIST 343, 344, 346A, 348, 349, 359B, 355, 358A, 358C, 358D, 464  
 LA 306, 307  
 PHIL 302, 328, 330, 331, 333  
 POLI 330, 350, 351, 352, 360, 361, 411, 433, 465, 468, 470  
 PSYC 300A, 330, 331, 332, 335, 336, 339, 340, 441, 450  
 SOC W 350B, 355, 390, 450, 452, 455, 460, 476, 477, 490  
 SOCI: all third and fourth year courses are recommended  
 WS 301, 302, 350, 380, 395

Total Units for the program: 60.

## COURSES

Some third and fourth year courses may be taken by students outside the School with the permission of the Director. SOC W 350A, 354, 401, 452, 455 and 477 may be of particular interest to students in Child and Youth Care, Nursing, Law, Education, and Public Administration. Students in other faculties wishing to take these courses should consult the appropriate advising service.

(Course offering codes: Y = Sept.-Apr., F = Sept.-Dec., S = Jan.-Apr., K = May-Aug., NO = Not offered, this session)

### SOC W 200A (1½) AN INTRODUCTION TO SOCIAL WORK PRACTICE

An introduction to knowledge, skills and value base for generalist social work practice that focuses both on private troubles and public issues. Informal helping and self-help groups are introduced, and the partnership of the client in any change effort is emphasized. This course is intended to assist students to evaluate their interest, motivation, and capabilities for professional social work. FSK(3-0)

### SOC W 200B (1½) AN INTRODUCTION TO SOCIAL WELFARE IN CANADA

An introduction to and analysis of the history and structure of major social policies and programs in Canada with a focus on connecting private troubles and public issues. Emphasis will be on developing understanding of the impact of policies and programs on women and First Nations people. This course reviews the social service and human rights responses to social problems in general, and to the problems of poverty and economic disadvantage in particular. The role of the social worker in influencing policy development is examined. FSK(3-0)

### SOC W 202 (3) FIRST NATIONS CULTURAL IMMERSION

The objective of this course is to provide students with the opportunity to develop their knowledge and appreciation of First Nations' Culture, including values, philosophies, survival skills, technologies, arts and ceremonies. (This course is available only in the intercession period and is organized by the Nicola Valley Institute of Technology in Merritt.) Registration is limited. Students attending NVIT and First Nations students will receive preference in registering. (Prerequisites: 200A, 200B, and practice experience) SK(Grading: COM, N or F (20 days))

### SOC W 202A (1½) FIRST NATIONS CULTURAL IMMERSION I

The objective of this course is as outlined in SOC W 202, and this course will involve at least two field trips which provide the student an opportunity to experience how First Nations culture may interface with social work practice. (Prerequisites: 200A, 200B and practice experience) (This course is offered at NVIT only) Grading: COM, N, or F F(3-0)

### SOC W 202B (1½) FIRST NATIONS CULTURAL IMMERSION II

The objective of this course is as outlined in SOC W 202, and this course will involve at least two field trips which will provide the student an opportunity to experience how First Nations culture may interface with social work practice. (Prerequisites: 200A, 200B and practice experience) (This course is offered at NVIT only) Grading: COM, N, or F S(3-0)

### SOC W 300 (6) INTEGRATED PRACTICE COURSE

This course presents an integrated approach to social work ideology, values, theory and skills as addressed in the School's Mission Statement, focusing on the themes of power and oppression. Emphasis is given to community and social change, as well as to practice with individuals and groups facing private troubles. The course will assist students to develop a personal and professional commitment to social work, knowledge for practice, and skill in interpersonal helping. (Credit cannot be given for both 300 and 303 and/or 352) Y

### SOC W 303 (3) SOCIAL WORK PRACTICE AND PLANNED CHANGE

The objective of this course is to introduce students to the generic approach to social work practice by using major concepts and theories concerned with the planning of change. (Corequisite: 352 is normally required, except with Director's permission) NO(1½-0-1½)

### SOC W 304 (4½, formerly 6) SOCIAL WORK FIELD PRACTICE

In the third year field placement, students are assigned a wide range of responsibilities at the individual, group and community level. Precise objectives will be established on a contract basis between students, faculty and the agency. (Pre- or corequisites: 300 (or 303 and 352)) (Grading: INP, letter grade) YK



**SOC W 350 (3) LAW AND SOCIAL SERVICES**

The objective is to provide students in Child & Youth Care and Social Work with an understanding of the Law as an expression of social policy and of the processes by which laws are developed, enacted and changed; Family Law and the Family Courts with special reference to laws affecting children and youth; human rights as they apply to social services; the organization of legal services; and the legal accountability and liabilities of social workers, child care workers and others in the social services field. (*Prerequisites:* Third year standing or instructor permission only) (Note: Available to distance education students only who take this course as an alternative to 350A) Y(3-0)

**SOC W 350A (formerly half of 350) (CYC 350A) (1½) LAW AND SOCIAL SERVICES**

The objective is to provide Social Work and Child and Youth Care students with an understanding of laws and processes that impact on their professional practice, accountability and ethics. For example these include law concerning child welfare, young offenders, income assistance and families. (*Prerequisite:* Third year standing or instructor's permission only) F

**SOC W 350B (formerly half of 350) (1½) LEGAL SKILLS FOR SOCIAL WORKERS**

The objective is to develop basic competency in court skills (report writing, court presentation, evidence giving), advocacy skills (individual and group, political lobbying, advocating before tribunals, etc.), and conflict resolution skills (negotiation, mediation, arbitration, etc.), for Social Work students. (Open to third and fourth year HSD students with instructor's permission) (Enrolment may be limited) (*Prerequisite:* 350A or CYC 350A) S

**SOC W 352 (3) INTERPERSONAL COMMUNICATION**

This course has a number of interrelated objectives; to introduce students to the literature on interpersonal communication; to afford an opportunity for a critical review of various approaches to interpersonal helping; to assist students in developing a personal commitment to, and philosophy of, the art of interpersonal helping; and to involve students in simulated practice experiences. (*Corequisite:* 303 is normally required, except with the Director's permission) NO(1-0-2)

**SOC W 354 (formerly SOCW 454) (1½) AN INTRODUCTION TO FIRST NATIONS ISSUES AND HUMAN SERVICES**

The course will critically examine the historical process of colonization in Canada, the resulting barriers embedded in policy and practice, and alternative ways of viewing the social-psychological position of First Nations people in Canadian Society. Contemporary issues and the movement toward self determination will be discussed in relation to social work theory and practice. (Credit will not be given for both 354 and 454) FSK(3-0)

**SOC W 355 (formerly half of 351) (1½) HUMAN DEVELOPMENT**

The objectives of this course are to: (1) introduce students to concepts and models of how human behaviour is acquired, maintained and modified, and (2) develop an understanding of normal human development as a knowledge base for practice with individuals, families and groups in a rural context. NO(3-0)

**SOC W 390 (1½ or 3) DIRECTED STUDIES**

Students must consult with the Director prior to registration. The intent is to allow students the opportunity to concentrate in a particular field of social welfare such as corrections, gerontology or mental health.

**SOC W 401 (1½) THE RESEARCH PRACTITIONER IN THE HUMAN SERVICES**

The objectives of this course are that the students will be able to: define research practitioner; appreciate the different ways of gaining knowledge; demonstrate an understanding of research process and a feminist approach to quantitative and qualitative research methodology; critically analyse research and evaluation studies. FK(3-0)

**SOC W 402 (6) SOCIAL WORK FIELD PRACTICE**

The intent of this course is to refine intervention skills at the individual, family, group and community level. Precise objectives will be established on a contract basis between students, faculty and the agency. Entry into this course will be restricted to fourth year students in the School of Social Work. (*Prerequisites:* 304, and three (3) of 401, 403, 450, 452, 455, 460, 476, 477) (Grading: INP, COM, N or F) SK

**SOC W 403 (1½) GENERALIST SOCIAL WORK PRACTICE**

This course has the objectives of (a) strengthening the students' understanding of generalist social work practice and problem solving approaches, (b) heightening the students' ability to recognize and grapple with ethical dilemmas, and (c) providing students with an opportunity to think critically about their own conceptual and philosophical or orientation to social work practice. (This course is only offered in distance education format.) (*Prerequisite:* 300 (or 303 and 352) SK(3-0)

**SOC W 450 (1½) UNDERSTANDING HUMAN SERVICE ORGANIZATIONS**

The objective of this course is to provide students with an understanding of the components and dynamics of human service organizations so that they may practise more effectively within these organizations and participate in their development and change. (This course will normally be restricted to students in the fourth year of social work and to students with at least fourth year standing in other professional programs with the permission of the instructor.) (Students may take NURS 450 instead of this course, with the permission of the nursing instructor.) F(3-0)

**SOC W 452 (1½, formerly 3) EDUCATIONAL STRATEGIES IN SOCIAL WORK: CONTENT AND PROCESS**

This course focuses on the use of adult education as a strategy for individual and social change. The course uses the medium of student presented workshops, to achieve its objective of developing skills and knowledge for planning and delivery of educational programs. (May be taken once only for credit) (Entry into this course is normally restricted to fourth year students in the School of Social Work and to students with at least fourth year standing in other professional programs with the permission of the Director of the School of Social Work.) F(3-0)

**SOC W 455 (formerly half of 351) (1½) THE RURAL COMMUNITY**

The objectives of this course are to: (1) analyze rural community structures and problems, (2) understand the delivery of human services in rural communities, and (3) review approaches to community work practice. F(3-0)

**SOC W 460 (1½ or 3) SPECIAL TOPICS IN SOCIAL WORK AND SOCIAL WELFARE**

This is a variable content course that will deal with special issues in social welfare and approaches to social work practice. Restricted to students in the third or fourth year of study. May be taken more than once for credit to a maximum of three units. (Offered as resources permit) FS(3-0)

**SOC W 476 (1½) FAMILY AND CHILD WELFARE POLICY**

Critiques of family and child welfare policy and practice such as the feminist and First Nations perspectives are challenging the social work profession. This course provides an opportunity to critically examine assumptions in family and child welfare policy including, notions of family, substitute care, conceptions about violence and neglect, how family and child welfare policy is developed and administered, and the political role of social work. (This course will normally be restricted to students in the fourth year of social work and to students with at least a fourth year standing in other professional programs with permission of the instructor.) F(3-0)

**SOC W 477 (1½) FAMILY PRACTICE**

The primary objective of this course is to introduce students to interdisciplinary theoretical perspectives and practice approaches that are relevant for working with the contemporary family in all its forms. A family systems framework and a feminist perspective will provide the theoretical base from which students will begin to develop their own family practice skills through experiential learning techniques. This course is open to both third and fourth year HSD students, and students from other faculties with instructor permission. (Credit will not be permitted for 477 and 485/486) FK(3-0)

**SOC W 490 (1½ or 3) DIRECTED STUDIES**

Students must consult with the Director prior to registration. The intent is to allow students the opportunity to concentrate in a particular field of social welfare such as corrections, gerontology or mental health.



# FACULTY OF LAW

David S. Cohen, B.Sc. (McG.), LL.B. (Tor.), LL.M. (Yale), Professor and Dean of the Faculty

Andrew J. Pirie, B.A. (Wat.), LL.B. (Dal.), LL.M. (Well.), of the Bar of Ontario, Associate Professor and Associate Dean of the Faculty

James L. Cassels, B.A. (Car.), LL.B. (W. Ont.), LL.M. (Col.), of the Bar of British Columbia, Professor

Donald G. Casswell, B.Sc. (Tor.), LL.B. (York), LL.M. (Tor.), of the Bar of Ontario, Professor

Gerard A. Ferguson, B.A. (St. Patrick's), LL.B. (Ott.), LL.M. (N.Y.), of the Bar of Ontario, Professor

Hamar Foster, B.A. (Queen's), M.A. (Sus.), LL.B. (Brit. Col.), M. Jur. (Auck.), F.R. Hist.S., of the Bar of British Columbia, Professor

J. Donald Galloway, LL.B. (Edin.), LL.M. (Harv.), Professor

Robert G. Howell, LL.B. (Well.), LL.M. (Ill.), of the Bar of New Zealand, Professor

Douglas M. Johnston, M.A., LL.B. (St. And.), M.C.L. (McG.), LL.M., J.S.D. (Yale), Professor and Chair in Asia Pacific Legal Relations

Maureen A. Maloney, LL.B. (Warw.), LL.M. (Tor.), Professor

John P.S. McLaren, LL.B. (St. And.), LL.M. (Lond.), LL.M. (Mich.), of the Bar of Ontario, Lansdowne Professor of Law

Michael M'Gonigle, LL.B. (Tor.), M.Sc. (Lond. Sch. Econ.), LL.M., J.S.D. (Yale), of the Bar of British Columbia, Professor and Chair in Environmental Law and Policy

William A.W. Neilson, B.Com. (Tor.), LL.B. (Brit. Col.), LL.M. (Harv.), of the Bar of British Columbia, Professor

Lyman R. Robinson, Q.C., B.A., LL.B. (Sask.), LL.M. (Harv.), of the Bar of British Columbia, Professor

Mary Anne Waldron, B.A. (Brandon), LL.B. (Man.), LL.M. (Brit. Col.), of the Bar of British Columbia, Professor

Terry J. Wuester, B.A. (Bethany Nazarene Coll.), M.A. (Missouri), J.D. (Kan.), LL.M. (Yale), of the Bars of British Columbia, Saskatchewan and Kansas, Professor

John N. Davis, LL.B. (Tor.), M.L.S. (W. Ont.), of the Bar of Ontario, Associate Professor and Law Librarian

Mark R. Gillen, B.Com. (Tor.), M.B.A., LL.B. (York), LL.M. (Tor.), Associate Professor

John R. Kilcoyne, LL.B. (U. of Vic.), LL.M. (York), of the Bar of British Columbia, Associate Professor

Hester A. Lessard, LL.B. (Dal.), LL.M. (Col.) Associate Professor

Sandra K. McCallum, B. Juris, LL.B. (Monash), LL.M. (Brit. Col.), of Bar of British Columbia, Associate Professor

Theodore McDorman, B.A. (Tor.), LL.B., LL.M. (Dal.), of the Bar of Nova Scotia, Associate Professor

Andrew J. Petter, LL.B. (U. of Vic.), LL.M. (Cantab.), of the Bar of Saskatchewan, Associate Professor

M. Cheryl Crane, B.A., LL.B. (Sask.), LL.M. (Cantab.), Assistant Professor

Lisa C. Philipps, LL.B., LL.M. (Tor.), Assistant Professor

Margot E. Young, B.A. (Brit. Col.), LL.B., M.A. (Tor.), M.A. (Calif., Berk.), Assistant Professor

Christopher Tollefson, B.A. (Queen's), LL.B. (U. of Vic.), Assistant Professor

April D. Katz, B.A., LL.B. (Man.), Cooperative Education Coordinator

Janet L. Person, B.Admin. (S. Fraser), Admissions Assistant

Richard A. Rennie, C.D., B.Comm. (Brit. Col.), LL.B. (U. of Vic.), M.P.A. (Car.), Assistant to the Dean and Admissions/Records Officer

## Visiting, Adjunct and Cross-listed Appointments:

Donovan W.M. Waters, Q.C., B.A., B.C.L., M.A. (Oxon.), Ph.D. (Lond.), D.C.L. (Oxon.), F.R.S.C., Barrister-at-Law, Lincoln's Inn and the Bar of British Columbia, Scholar's Chair (1993-96)

William R. McIntyre, Q.C., LL.B. (Sask.), Honorary Professor

David R. Williams, Q.C., B.A., LL.B. (Brit. Col.), of the Bar of British Columbia, Adjunct Professor (1995-96)

E. Jack Woodward, B.A. (Brit. Col.), LL.B. (U. of Vic.), of the Bar of British Columbia, Adjunct Professor (1995-96)

Heather Raven, B.A., LL.B. (Brit. Col.), Visiting Assistant Professor (1994-95)

The Faculty of Law offers a three year program leading to the Bachelor of Laws (LL.B) degree. The Faculty has been granted the status of 'an approved law school' by the governing bodies of the legal profession in the various common law provinces. This accords the Bachelor of Laws degree of the University of Victoria the same status as that of other common law schools in Canada.

## APPLICATION FOR ADMISSION

Application forms for first admission to the University or for reregistration, and application packages for admission to the Faculty of Law are available from the office of the Admissions Officer. All applications must be submitted by March 31. However, applicants for first admission in the Regular category are strongly recommended to submit applications by December 31 of the preceding year as offers will be made during the months January through March of the year of Admission.

## REQUIREMENTS FOR ADMISSION TO THE FIRST YEAR PROGRAM

### Regular Applicants

The Faculty of Law may admit a candidate who:

1. presents proof of having received, with standing satisfactory to the Faculty of Law, a degree from the University of Victoria or an equivalent degree from a recognized university; or
2. presents proof of having completed, with standing satisfactory to the Faculty of Law, at least the first three years (forty-five units) of a program leading to a degree at the University of Victoria, or the equivalent at a recognized university.

In addition, each applicant must submit a Law School Admission Test score obtained since June 1991 and satisfy such other requirements as may be prescribed from time to time.

NOTE: Since the number of candidates who meet the minimum requirements for eligibility far exceeds the number of places available, it should be understood that eligibility does not guarantee admission. Admission is decided on a competitive basis taking into account, principally, a candidate's prelaw academic record and Law School Admission Test scores. The extra-curricular activities, community involvement, work experience and personal characteristics of applicants are considered.

### Special Access Applicants

A limited number of Special Access Applicants will be accepted for admission in each year from applicants whose academic achievements have been significantly delayed, interrupted or adversely affected by:

- (a) physical, cultural, or economic disadvantage; or
- (b) family or similar responsibilities and the consequent need to attend to these responsibilities or to maintain employment.

Applicants who qualify in this category will be selected for admission on the basis of:

- (a) the achievements of the applicant in occupational endeavours, and community, public service and cultural activities that indicate an ability to succeed in law school;
- (b) the academic performance in any educational or training program or courses;
- (c) the Law School Admission Test score;
- (d) whether it would be unreasonable to expect the applicant to complete the minimum academic requirements prior to the commencement of law school;

and, in the case of an applicant who has not completed any university or college courses,

- (e) the applicants's demonstrated ability to write effectively at a law school level.



### Native Applicants

The Faculty of Law is anxious that the number of people of Indian, Metis and Inuit backgrounds among the ranks of the legal profession increase substantially and, accordingly, encourages inquiries and applications from Native people.

Applications from Canadian Native people will be considered on an individual basis taking into account such factors as academic performance, results of the Law School Admission Test, employment history, potential for personal growth, personal interviews and letters of reference.

If an applicant's academic background makes it appropriate, the Admissions Committee may make any offer of admission conditional upon successful completion of the Program of Legal Studies for Native People conducted by the Native Law Centre at the University of Saskatchewan. The Faculty fully endorses this 'head start' program, and considerable weight is placed upon the evaluation submitted by its Director. It should be noted that all Native applicants of registered status and a limited number of nonstatus Native or Metis applicants are eligible for governmental financial assistance throughout both the Saskatchewan program and the LL.B. program at a Canadian Law School. This will cover tuition fees, books and other classroom materials, plus a modest living allowance. For more complete information concerning the Program of Legal Studies for Native People, interested applicants should write to:

The Director  
Program of Legal Studies for Native People  
Native Law Centre  
University of Saskatchewan  
Saskatoon, Saskatchewan  
Canada S7N 0W0

### Part Time Students

A limited number of students will be considered for admission in any one year from applicants who meet the admission criteria and admission standards of full time applicants in the Regular Applicant, Mature Applicant, Special Applicant and Native Applicant admission categories and who demonstrate to the satisfaction of the Faculty that they are unable to attend on a full time basis because of health or physical disability, or exceptional family or financial hardship.

## COOPERATIVE EDUCATION PROGRAM

1. The University Regulations with respect to Cooperative Education Programs are applicable to the Faculty of Law Coop Program except to the extent that they are modified by regulations adopted by the Faculty of Law and approved by the Senate.
2. A student who registers in the Law Coop program must satisfactorily complete a minimum of three Coop Work Terms.
3. Students who have completed first year law at the University of Victoria or who are eligible to receive advanced standing credit at the University of Victoria for first year law are eligible to enroll in Law Coop.
4. Coop Work Terms shall normally alternate with academic terms. With the permission of the Law Coop Coordinator, a student may be permitted to enroll in a maximum of two consecutive Coop Work Terms or two consecutive academic terms.
5. The performance of students registered in a Law Coop Work Term shall be graded on the basis of COM, N or F.
6. The Faculty may require a student to withdraw from a Coop Work Term where the student's performance has not been satisfactory.

## CONCURRENT LL.B./M.P.A. PROGRAM

Students who apply and are accepted into both the Law Faculty LL.B. and School of Public Administration M.P.A. programs may earn both degrees concurrently with modified requirements for each. The M.P.A. requirements are set out elsewhere in this Calendar.

The two degrees normally require five years of study whereas the concurrent degrees may be completed in four years. The first year of the program will be devoted entirely to the first year law curriculum. The second year of the program will be devoted to completion of the Public Administration foundation courses in combination with several law courses (normally 6 to 9 units). The remaining two years will be devoted

to completion of all other Law and Public Administration course requirements.

Students in the concurrent degrees program must complete, after first year law, 29 units of law courses, or law-approved courses, including the following:

- (i) Public Law Term (7½ units);
- (ii) 3 units of Public Administration courses in lieu of the Law Faculty's 3 unit non-law course option in other Faculties; and
- (iii) Public Administration 598 (3 units) in lieu of 3 units of Law 399.

## TRANSFER AND VISITING STUDENTS

Applications may be considered from students who wish to attend the Faculty of Law of the University of Victoria as Transfer Students or as Visiting Students. The Faculty of Law is not obliged to accept applications from students in these categories. The number of applications which are accepted will be limited in order to ensure that the size of the class which these students will be entering is not significantly altered.

### A. Transfer Student Applications

Applicants who seek to transfer to the Faculty of Law must complete a minimum of two years of legal education in the Faculty of Law in order to obtain a Bachelor of Laws degree from the University of Victoria.

Applications shall be accompanied by:

- (a) The academic record of the applicant, and
- (b) The applicant's reasons and motivation for seeking to transfer to the Faculty of Law of the University of Victoria;

and will be considered if:

- (i) The applicant meets all of the eligibility requirements for admission to the First Year Program of the Faculty of Law, and
- (ii) The law courses which have been completed by the applicant are compatible with the curriculum of the Faculty of Law.

Preference will be given to students who are academically outstanding or who have the potential to make a unique contribution to the academic program of the Faculty of Law and to students who have applied on compassionate grounds. Students who have undertaken their previous legal education at a Canadian Law School will be given preference over applicants whose previous legal training has been undertaken outside Canada.

### B. Visiting Students (Students with a Letter of Permission)

Applications from Visiting Students from another University may be accepted subject to the discretion of the Dean and their course programs being approved by the Deans of both Law Schools.

## REGISTRATION

Inquiries relating to registration in the Faculty of Law should be addressed to the Administrative Assistant to the Dean of the Faculty of Law. The mailing address is:

Faculty of Law  
University of Victoria  
P.O. Box 2400  
Victoria, B.C.  
V8W 3H7

### Completion of Registration

In addition to completing the procedures mentioned under the heading Requirements for Admission, all students are required to register at the times announced by the Faculty of Law. All new students, by their Letter of Admission and all returning students, by their Authorization to Reregister, will be informed of the time and place for registration. Students registering in the first year of the program are required to register in person.

All Letters of Admission or Authorizations to Reregister that are not used to register in the term or session to which they apply, have no further validity.



### Registration in Any Course is Not Confirmed Until

- (a) all course prerequisites have been met;
- (b) the required registration procedures have been completed;
- (c) all required fees have been paid (see Payment of Accounts, page 23); and
- (d) classes in the course have begun and the student is in attendance.

The Faculty reserves the right to cancel the registration in a course of any student who fails to attend that course within seven calendar days of the commencement of the term, or of any student who is not able to demonstrate that all course prerequisites have been met.

A student who for medical or compassionate reasons is unable to attend a course during the first seven calendar days of the term may apply to the Dean within that time to confirm registration in that course and the Dean may confirm the registration.

### Student Responsibility

Students are responsible for ensuring that their courses have been chosen in conformity with Calendar regulations. Also, all students are responsible for the completeness and accuracy of their registration. They must ensure that there is no discrepancy between the program they are following and the approved program recorded in the Dean's Office of the Faculty of Law, and that all changes in address and telephone number, are reported promptly to the Dean's Office of the Faculty which in turn will notify Records Services. Students may not take courses for which they have not registered, and may not drop courses without permission. Students who register in a course for which they have previously received credit or for which they have received equivalent credit on transfer, must indicate this by entering DUP (duplicate) on their registration forms.

A letter mailed to a student's address as currently on record in the Dean's Office of the Faculty of Law or Records Services will be deemed adequate notification to the student for all matters concerning the University.

### Late Registration

The period for late registration in the Winter Session is the first five days of classes; in the Summer Studies, the first two days of classes.

### Registration For Both Terms in Winter Session

Students planning to undertake studies in both terms of the Winter Session must register in September for all courses they intend to take, including single term courses beginning in January.

### Changes in Registration

1. Students may add and drop courses during the first eight days of law classes in the First Term and during the first eight days of the Second Term upon submission of the appropriate change form to the Dean's Office of the Faculty of Law which in turn will notify Records Services.
2. Students may drop First Term courses until the last day of classes in October and Full Year and Second Term courses until the last day of classes in February provided that the student's program still meets the requirements of Regulations 4 and 5 pertaining to an approved program and provided they submit the academic change form to the Dean's Office which in turn will notify Records Services. Failure to notify the Faculty of Law by the specified date will result in the student receiving a failing grade for the courses.
3. Any student, who after registration decides to drop all courses, is withdrawing from the University and must notify the Dean's Office of the Faculty of Law in writing, which will in turn notify Records Services.

### Concurrent Registration in Courses at Other Faculties of Law

With the approval of the Dean, or the Dean's nominee, students are permitted to register in a course(s) in the Faculty of Law at the University of British Columbia concurrently while enrolled in the Faculty of Law at the University of Victoria. Courses satisfactorily completed at the University of British Columbia will be granted credit towards their degree at the University of Victoria.

### Temporary Withdrawal and Reregistration

Upon successful completion of an academic year and/or term, a student may on a single occasion elect not to continue in the LL.B. program for a single period not exceeding two academic years. With the permission of the Dean and/or Faculty, a student may be permitted to reenroll in either the First or Second Term of the Winter Session after

such a stop out within the two year period. A student who does not reenroll in the LL.B. program within two academic years must reapply for admission to the Faculty.

When a student stops out after completing the First Term of Winter Session, the Regulations which are normally applicable to an academic year, including regulations for achieving standing in a year, shall be applied to a program consisting of the term completed prior to stopping out and the next term which the student completed after reenrollment.

If the student is enrolled in a course which spans both the first and second terms, the student will not be permitted to withdraw and retain credit unless the student has completed courses in the First Term which are worth at least 7 units. In no case may a student retain partial credit for a full year course which has not been fully completed.

When a student stops out after the completion of an academic year and the student reenrolls in the Second Term of Winter Session, regulations which are normally applicable to an academic year including regulations for achieving standing in a year, shall be applied to a program consisting of the term completed prior to stopping out and the next term which the student completed after reenrollment.

### Registration in the Common Law-Civil Law Exchange Program

Students registering in and successfully completing the Civil Law/Common Law Summer Exchange Program may receive 2 units of credit towards their Law Program at the University of Victoria upon submission of official documentation confirming successful completion of the program. This credit will be applied to the year immediately following the completion of the Summer Program.

## GENERAL INFORMATION

### 1. Academic Studies

The academic session in the Faculty of Law extends for approximately thirty effective teaching weeks exclusive of examination periods.

### 2. Grading

|                | Grade | Grade Point Value |  |
|----------------|-------|-------------------|--|
| Passing Grades | A+    | 9                 |  |
|                | A     | 8                 | First Class  |
|                | A-    | 7                 | (With Distinction)   |
|                | B+    | 6                 |  |
|                | B     | 5                 |  |
|                | B-    | 4                 | Second Class   |
|                | C+    | 3                 |  |
| Failing Grades | C     | 2                 | Pass   |
|                | D     | 1                 |  |
|                | *COM  | N/A               | Complete (pass)  |
|                | F     | 0                 |  |
|                | *N    | 0                 | Did not write examination or otherwise complete course requirements by the end of the term or session; no supplemental |

Temporary Grade: \*DEF N/A Deferred examination granted

\* COM — Used only for courses designated by the Senate. Such courses are identified in the course listings.

\* N — in exceptional circumstances, the Faculty may authorize the removal of an N grade and the replacement of it by another grade. In accordance with Senate Regulations, an instructor shall advise students at the beginning of term of the circumstances under which they would be assigned a final grade of N.

\* DEF — Used only for courses in which a deferred examination has been granted because of illness or other special circumstances.

### 3. Review of an Assigned Grade

Students are referred to the general University regulations given on page 21 and to the regulations adopted by the Faculty of Law. The following regulations apply to students in the Faculty of Law.



- (a) Any request for a review of a final grade must normally reach the Dean's office within 21 days after the release of grades by the Dean's Office.
- (b) Where a final grade is based wholly or in part on any written materials other than an examination paper, such materials shall, for the purpose of these procedures, be treated as if they are examination papers.

#### 4. First Year Program

All courses in the First Year Program are compulsory.

Full time students must enroll in all courses in the First Year Program.

In the first academic year of attendance, part time students must enroll in courses amounting to not less than 7 units of courses including 104 (2) The Law, Legislation, and Policy; 106 (1) Legal Process; and 110 (1) Legal Research and Writing. In the second academic year of attendance, part time students must complete the remainder of the compulsory First Year program.

#### 5. Second and Third Year Programs

- (a) The Faculty of Law may designate courses as compulsory, prerequisite, or recommended courses.
- (b) In each of the second and third years of the program, a student shall enroll in a course program which has been approved by the Dean or the Dean's nominee.
- (c) An approved program for a full time student under paragraph (b) is one in which a student is enrolled in courses totalling not less than 14½ units and not more than 16½ units over the academic session (that is, during the thirty week period). An approved program for a part time student under paragraph (b) is one in which a student is enrolled in courses totalling not less than 7 units and not more than 14½ units, over the academic session (that is, during the thirty week period).
- (d) Without the permission of the Dean or the Dean's nominee, a full time student may not carry less than 7 units or more than 8½ units in one term per session (that is, during the fifteen week period). Without the permission of the Dean or the Dean's nominee, a part time student may not carry less than 3 units or more than 7 units in one term per session (that is, during the fifteen week period).
- (e) In order to complete the requirements of the Program, a student must enroll in approved programs for the Second and Third Year which amount in the aggregate to not less than 29 units.

#### 6. Standing

- (a) Standing in First, Second or Third Year shall be granted when,
  - (i) a student passes all of the courses in the student's approved program for the year and does not have any N or DEF grades in any course, and,
  - (ii) a student obtains a grade point average of at least 3.00 in the courses not graded on a pass/fail (COM, N, or F) basis.

In addition to satisfying the requirements of the preceding paragraph part time students in Second Year or Third Year must satisfy the following requirements at the end of each academic session. In order to proceed to the next academic session a part time student must pass all of the courses in the student's approved program for the academic session and attain a grade point average of at least 3.00 in the courses for the academic session.

- (b) Standing in the Program shall be granted when a student achieves Standing in each of the First, Second and Third Years and completes a research paper on an approved subject of not less than 7,500 words during either the Second or Third Year upon which the student has received a grade of C+ or better. The requirement may be satisfied in the context of existing courses.

#### 7. Supplemental Examinations

- (a) Where a full time student does not achieve standing under Regulation 6 above, but attains a grade point average of at least 2.00, the student shall be permitted to write supplemental examinations in not more than
  - (i) two courses (including Private Law Process), or
  - (ii) two separate components of Private Law Process, or

- (iii) one course (except Private Law Process) and one component of Private Law Process representing not more than six units, in order to obtain the standing required. Where a part time student does not achieve standing or satisfy the requirements under Regulation 6 above, but attains a grade point average of at least 2.00 the student shall be permitted to write one supplemental examination.

- (b) Where a student, enrolled in a clinical program or other course exclusively for a term (15 weeks), fails to meet the grade requirement of Regulation 6, the matter shall be referred to the Faculty or a committee thereof. The Faculty, after considering the recommendation of any committee to which the matter has been referred may confirm the failing grade or may permit the student to undertake any one or more of the following:

- (i) supplemental examinations,
- (ii) the completion of such assignments, papers or tests as may be appropriate, or
- (iii) remedial work designated by the Faculty.

Where, in the opinion of the Faculty, the student's conduct or lack of competence in the clinical program or course may adversely affect members of the public or personnel including students associated with the program or course, the Faculty may prohibit the student from re-enrolling in the program or course or the Faculty may require the student to withdraw from the Faculty.

- (c) Subject to paragraph (d), supplemental examinations shall not be written in courses or Private Law Process components where a student has attained a grade of C+ or better.
- (d) If a student elects to write a supplemental examination in the Private Law Process course, the student shall write all three components whether or not a grade of C+ or better has been obtained in one or more components. However, an overall grade of C+ or better in the Private Law Process course shall not bar a student from electing to write a supplemental examination in a separate component of Private Law Process where the student has not obtained a C+ or better.
- (e) The grade point value for supplemental examinations shall be determined in accordance with the grading scale contained in the Regulations of the Faculty of Law. The original sessional grade point average and a revised sessional grade point average, taking into account the supplemental examination results, shall be recorded on a student's transcript.

#### 8. Special Examinations

- (a) Subject to subsections (b) and (c), the Faculty may authorize the writing of Special Examinations to achieve standing under Regulation 6 where the Faculty determines that a student's ability to write or to complete an examination or other academic requirement has been affected by illness, family affliction or other special circumstances.
- (b) A request for a Special Examination under subsection (a) must be made in writing to the Dean within five days after the date on which the original examination was written or was to be written, or within five days after the date on which the other academic requirement was due, and the student must provide a physician's report or other substantiating document as soon as possible.
- (c) For the purposes of providing evidence to the Faculty as to the nature of the illness and the effect of that illness upon the student's ability to complete an examination or other academic requirement, the physician's medical report should be made on the form approved by the Faculty of Law for that purpose wherever possible. Where the form provided by the Faculty of Law is not used, the medical report should contain the kinds of information sought on that form.
- (d) Where a student has written an examination, a request for a Special Examination under (b) shall be confirmed or withdrawn by the student within ten days after marks have been released by the Dean's Office. Where the request is not confirmed within that ten day period, it shall be deemed to have been withdrawn.
- (e) Special Examinations for the year are normally written in early August.
- (f) Students will be advised in writing with respect to procedures to be followed in such cases.



- (g) The mark obtained on a Special Examination or other academic requirement written pursuant to this regulation will replace only the mark the student had or would have had on that component of the course.

#### 9. Credit for Courses Outside the Faculty

- A student may, in the second and third year, take courses in other departments and schools in the University for credit in the Faculty of Law. A student may not take Summer studies courses for credit unless that student is enrolled full-time in the Law academic summer term, in which case Faculty regulations respecting approval and unit limit for those courses shall apply as if the course were taken in a fall or winter term of the LL.B. Program.
- A student may take up to 3 units of such courses over the two academic years;
- A student must obtain the approval of the Dean of Law or the Dean's nominee and the outside instructor in advance of registration for any such course. The approval of the Dean or the Dean's nominee is based upon criteria set out in Faculty regulations.
- A student enrolled in the concurrent LL.B./M.P.A. program may take an additional 3 units of Public Administration 598 in lieu of 3 units of Law 399.

#### 10. Repetition of a Year

A student who fails to obtain standing in any Year may apply to the Faculty for permission to repeat the Year.

#### 11. Special Provision

Notwithstanding anything contained in these regulations, the Faculty shall exercise an equitable discretion in a particular case so as to achieve a fair and reasonable result.

#### 12. Other Academic Regulations

Students registered in the Faculty are subject to such other general academic regulations of the University as the Senate, on the recommendation of the Faculty, may wish to apply.

#### 13. Part Time Students

A student who is admitted as a part time student may not become a full time student until the student has achieved standing in First Year.

In order to continue as a part time student after achieving standing in First Year, a student is obliged to demonstrate to the Faculty at the beginning of each academic session that he continues to be unable to attend on a full time basis because of health or physical disability, or exceptional family or financial hardship.

A student who achieved standing in First Year as a full time student, may apply to continue his studies as a part time student. The Faculty may allow a limited number of these students to enroll as part time students upon being satisfied that a student is unable to continue as a full time student because of health or physical disability, or family or financial hardship.

#### 14. Temporary Withdrawal of Students Enrolled in Law Centre Clinical Program Pending Report

Where, during the course of a term, there are reasonable grounds to believe that the conduct or lack of competence of a law student enrolled in the Law Centre Clinical Program has adversely affected or may adversely affect,

- clients of the Law Centre,
- personnel including students associated with the Law Centre,
- the Law Centre's relationship with the judiciary or members of the practising bar,

the Dean may require a student to withdraw temporarily from the Law Centre Clinical Program pending the receipt of a report on the conduct and lack of competence of the student.

#### 15. Faculty May Require Student to Withdraw from Law Centre

After giving the student an opportunity to be heard, the Faculty may require a student to withdraw from the Law Centre Clinical Program where the Faculty is satisfied that the student's conduct or lack of competence may adversely affect members of any of the groups identified in Regulation 14.

#### 16. Grade of N in Law Centre Clinical Program

Where the Faculty requires a student to withdraw from the Law Centre Clinical Program, a grade of N shall be entered on the student's academic record and transcript.

#### 17. Concurrent LL.B./M.P.A. Degrees

Students enrolled in the concurrent LL.B./M.P.A. program will be subject to the above Law Faculty regulations *mutatis mutandis* in regard to their LL.B. course requirements. Grade point averages for the purposes of these regulations or for the purposes of awarding Law Faculty prizes and scholarship will be calculated only on their LL.B. course requirements.

## COURSES

Students should consult the Faculty concerning courses to be offered in any particular year.

#### LAW 100 (3) THE CONSTITUTIONAL LAW PROCESS

This course deals with the basic framework of the Canadian constitutional system and illustrates that the constitution is the skeletal framework within which the legal system functions. The function of a constitution, the main characteristics of constitutions and Constitutional Law, entrenchment, amendment, the nature and structure of the B.N.A. Act, the division of powers, concurrency in a federal state, the sources of Canadian Constitutional Law, executive power, legislative authority, delegation, the role of the judiciary, civil liberties, developing issues in Constitutional Law. (Full year course 75 hours)

#### LAW 102 (2) THE CRIMINAL LAW PROCESS

The course is an introduction to Criminal Law and its process as a means of sanctioning prohibited conduct. Attention is directed to the following matters:

- The reporting of crime including some discussion of the common characteristics of offenders and offences.
- The role of the police and the prosecutor in the pretrial portion of the process including such matters as arrest, search and seizure, and the discovery of evidence.
- The aims and purposes of the Criminal Law and the role of the lawyer in the Criminal Law process.
- The substantive Criminal Law including the ingredients of criminal offences and the application of the various defences which are available.
- Theories of punishment and practices of disposition and sentencing of offenders.

Students may be asked to spend up to ten hours in a field experience either in the courts, with police, or in corrections. Students are required to keep a journal in connection with this part of the course.

(Full year course 60 hours)

#### LAW 104 (2) THE LAW, LEGISLATION AND POLICY

Students are given an historical introduction to the doctrine of parliamentary sovereignty and an overview of the development of responsible government at the Provincial and Federal levels. The course examines judicial approaches to statutory interpretation including the canons, rules and presumptions and introduces students to the development of elementary legislative drafting skills. The preparliamentary stages of legislation, the institutions involved in law making and the sources of policy in both federal and provincial governments will be studied. The parliamentary stages of legislation and some aspects of parliamentary procedure will be examined together with criticisms of the parliamentary system and proposals for reform. (Full year course 60 hours)

#### LAW 106 (1) THE LEGAL PROCESS

The Legal Process seeks a perspective of the processes of decision making throughout the legal system by examining its major institutions and the function of substantive and procedural law within them. It attempts to provide first year students with a transactional "overview" of their new discipline in its totality. It also provides a background for courses in the second and third year program. This course introduces students to the institutional structure of the Canadian legal system and, at the same time, provides an analysis of the role of law in society. The course will have a variety of components, namely historical, institutional, procedural and philosophical. The role of law in society, the



function of the legal profession, the development of the legal system, the reception of English Law in Canada, the contemporary legal system in British Columbia, the structure of the courts, problems of fact finding and evidence stare decisis, sources of law, the legislative process, administrative tribunals, an introduction to jurisprudential concepts, future trends with respect to the role of law in society, including law reform, legal services, the legal profession, access to the law.

(Grading: COM, N, or F) (Full year course 30 hours)

#### **LAW 108 (6) THE PRIVATE LAW PROCESS**

These courses concentrate upon some of the basic rules or processes which regulate the relationships between private citizens. There is an attempt to integrate and interrelate many of the basic concepts normally covered in Contracts, Property, and Torts.

108A (2 units) Contracts (full year)

108B (2 units) Property (full year)

108C (2 units) Torts (full year)

(Full year course 200 hours)

#### **LAW 110 (1) LEGAL RESEARCH AND WRITING**

The purpose of the course is to acquaint the first year student with the variety of materials in the Law Library and to provide a knowledge of basic legal research techniques. The use of various research tools, including the computer, is considered. Through a variety of written assignments, the students will become familiar with accepted principles pertaining to proper citation in legal writing and will develop a degree of proficiency in legal writing and research. (Full year course 30 hours)

*Some of the following courses have not yet been offered but have been approved and will be offered when resources permit. Some of these courses are offered in alternative years.*

#### **LAW 301 (2) THE ADMINISTRATIVE LAW PROCESS**

This course will seek to investigate the nature and function of the administrative process with particular reference to the development of tribunals and agencies with a wide variety of disparate functions and interactions with private life. Similarly, the course will investigate the way in which tribunals and courts interact, with specific reference to the judicial arsenal available for the control of administrative behaviour.

(4-0)

#### **LAW 302 (1½) CRIMINAL LAW: II**

This course builds naturally upon the first year course in the Criminal Law Process with specific reference to defences and offences. In depth study of such matters as conspiracy, attempts, counselling, as well as the substantive offences of homicide, fraud, and contempt of court, will be carefully analyzed. Major defences, including double jeopardy, insanity, automatism and self defence will be scrutinized.

(3-0)

#### **LAW 303 (1½) CRIMINAL PROCEDURE**

Procedural protections pervade the area of Criminal Procedure. It is crucial that an advocate intending to act on behalf of a client in a criminal matter be aware, not only of the specific mechanics of criminal procedure, but of its underlying philosophy and goals. Hence the course will undertake a study of such matters as jurisdiction, election and reelection, particulars, discovery, the indictment, plea bargaining, abuse of process, juries, the trial and appellate processes.

(3-0)

#### **LAW 304 (5½-7½) CRIMINAL LAW TERM**

This course will provide students with a comprehensive understanding of the criminal process from its inception through the trial process and the corrections system. It is an intensive immersion program which will consider criminal procedure, sentencing and corrections, substantive criminal law, trial process and the law of evidence. Through a flexibly-designed program, students will consider all the major issues confronting the administration of criminal law.

(11-0) to (15-0)

#### **LAW 307 (1½ or 2) CIVIL PROCEDURE**

This course will be founded upon an inquiry into the functions of a modern procedural system with specific reference to the development of a process which considers the extent to which the specific system under study aids in the achievement of just, speedy and economic resolutions of justiciable conflicts on their merits. Students will be introduced to the basic structure of a civil action and major items for consideration throughout the development of civil litigation. In the

result, such matters as the expenses of litigation, jurisdiction, initial process, pleadings, amendment, joinder, discovery, disposition without trial and alternatives to adjudication will be discussed. (1½ units or 2 units depending upon whether the course includes a concentration in drafting)

307B (2) Concentration in drafting

(4-0)

#### **LAW 309 (2) THE LAW OF EVIDENCE**

This course will examine the objective structure and content of the law governing proof of facts in both civil and criminal trials, as well as before administrative tribunals. Rules of evidence respecting burdens of proof and presumptions, competence and compellability of witnesses, corroboration, hearsay, character, opinion evidence and a variety of other topics will be critically examined in the light of objectives of the legal process.

(4-0)

#### **LAW 312 (1½) DEBTOR AND CREDITOR RELATIONS**

The course will discuss legal aspects of the collection of judgments; use and problems of mechanic's liens; fraudulent transactions, both under provincial and federal law; creditor's arrangements; debtor assistance programs; and bankruptcy.

(3-0)

#### **LAW 313 (1½) SECURITIES REGULATION**

An overview of the law and policy aspects of securities regulation including the initial distribution of securities, the regulation of secondary market trading, takeover and issuer bid regulation, and the regulation of securities market intermediaries.

(3-0)

#### **LAW 314 (1-1½) SALE OF GOODS**

This course involves the study of the law pertaining to the sale of goods including an examination of the Sale of Goods Act, the Trade Practices Act and the Consumer Protection Act.

(2-0)

#### **LAW 315 (2½) BUSINESS ASSOCIATIONS**

This course will analyze and discuss various legal forms for carrying on trade. The course recognizes that the corporation is one of immense commercial and legal significance as an organizational form and will hence stress legislation and materials respecting the modern company. Students will, however, be exposed to the sole proprietorship, partnership and related agency principles.

(5-0) or (2-0; 3-0)

#### **LAW 316 (2) SECURED TRANSACTIONS AND NEGOTIABLE INSTRUMENTS**

After a brief history of chattel security law, this course will focus upon the law of secured transactions in personal property at both the consumer level and at the corporate level under the Personal Property Security Acts. The course will also introduce the student to Bank Act security and to the law of negotiable instruments.

(4-0)

#### **LAW 317 (2) REAL PROPERTY TRANSACTIONS**

This course will adopt a transactional perspective and analyze the development of a real property transaction from its inception to post completion problems. Specific reference will be had to listing the property for sale and the responsibilities and obligations of the agent under the Real Estate Act, specific matters relating to the interim agreement, financing of the purchase and assessment of title, as well as preparation of the file for closing. Brief consideration will be given to condominium law and landlord and tenant relations.

(4-0)

#### **LAW 318 (1½) REMEDIES**

This course seeks to highlight the interaction between the various substantive areas of private law: torts, property, contract and restitution. Additionally, the interaction between the common law and equity systems will be developed conceptually and historically. The course will concern itself with questions regarding damages, specific remedies, restitution, as well as analysis for alternative methods of remedial action through compensation schemes.

(3-0)

#### **LAW 319 (1½) TRUSTS**

This course concerns the trust as a mode of disposition of property for the benefit of successive or single beneficiaries, and the contrast is made with absolute dispositions. Comparison is made with other concepts of obligation and property holding. The creation, administration, variation and termination of express trusts are examined, and also the theory and applicability of resulting and constructive trusts.

(3-0)



**LAW 320 (1½) SUCCESSION AND ESTATE PLANNING**

This course involves the study of testate and intestate succession. The principles of the law of wills, both common law and statutory, and the statutory provisions for the devolution of intestate estates, will be examined. The drafting of wills is a feature of this course. Estate planning involves a general examination of the disposition of assets in life and on death against the background of income, inheritance and gift taxes. (3-0)

**LAW 321 (1½) COMPETITION LAW**

This course will trace the development of competition law from the common law doctrines of restraint of trade through the areas of trade-marks and statutory regulation of competitive practices contained in anticompetitive and competition law, with an examination of the policy and theory underlying government regulation of restrictive trade practices. (3-0)

**LAW 322 (1½) FAMILY LAW**

This course will consider the institution of the family, both in its social and legal contexts. Specific reference will be had to law relating to marriage, divorce, custody, matrimonial property and the role of the lawyer in the resolution of family problems. This is a course which is ideally suited to interdisciplinary team teaching in order that the course may helpfully illustrate the impact of legal decision making on the social unit of the family. (3-0)

**LAW 324 (1-1½) CHILDREN AND THE LAW**

Considering such questions as adoption, affiliation, child protection, juvenile delinquency, custody and access, this course will focus upon the impact of law and legal institutions on children and their relations in society. The course will attempt to bring the knowledge and expertise of specific, related disciplines to bear upon the development of law and the legal institutions in this area. (2-0)

**LAW 326 (2) EMPLOYMENT LAW**

This course offers an introduction to three legal regimes bearing upon the employment relationship:

- (1) the common law;
- (2) collective bargaining law; and
- (3) regulatory schemes in such fields as employment standards, human rights and occupational health and safety.

A major theme of the course is the relative strengths and weaknesses of these three regimes and the legal institutions charged with their administration. (Not open for credit to students who have credit for 326 prior to 1985-86) (4-0)

**LAW 327 (1½) JURISPRUDENCE**

A wide variety of topics may be considered in this course in order to develop a theoretical framework for the purpose and function of law in society. Various schools of jurisprudential thought will be analyzed, including the Natural Law school, the Positivist school, Pure Theory school, the Sociological school, the American and Scandinavian Realist schools as well as Historical and Anthropological Jurisprudence. (3-0)

**LAW 328 (ES 450) (1½) SEMINAR IN ENVIRONMENTAL LAW AND POLICY**

A seminar based on a selected theme in environmental law and policy; individual research, presentation and contribution to a collected work on the theme is required. Open to upper year students in the Faculty of Law and students with at least fourth year standing in the Environmental Studies Program. (Prerequisite: 329 or ES 418) (Law students should consult with the Instructor prior to enrollment. Environmental Studies students require the permission of the Director of Environmental Studies. Limited enrollment)

**LAW 329 (1½) ENVIRONMENTAL LAW**

The course builds upon courses in Torts, Property and Administrative Law. Certain aspects of the land use planning and resource laws are pertinent. The various legal techniques to contain environmental disruption will be critically examined, including common law liability rules and various statutory models which have evolved, including prohibition, licensing, economic incentives, effluent charges and compensation systems. Environmental impact assessment legislation will also be studied. (2-0)

**LAW 330 (1½) INTERNATIONAL LAW**

Public International Law is concerned with the legal relations of states and the individuals who compose them. The course seeks to explore the way in which sovereign powers choose to govern their interrelationships and analyzes problems which confront them. Topics will include an examination of the international legal system, modes of international law creation and law enforcement as well as the process of international adjudication. (3-0)

**LAW 331 (1½) COASTAL AND MARINE LAW**

This course considers various problems in international ocean resources law and policy. Bordering three oceans, Canada has an extensive interest in ocean matters particularly regarding fishing, offshore hydrocarbon development, navigation and the marine environment. This course concentrates on the problems and opportunities created by the existence of 200-n mile offshore zones. (3-0)

**LAW 332 (1½) INTERNATIONAL TRADE LAW**

International trade constitutes a crucial 30% of Canadian economic activity and this course explores the major legal and policy aspects of the international trade regime in which the Canadian economy operates. The principal emphasis is upon the General Agreement on Tariffs and Trade (GATT) and Canada's international obligations thereunder, as well as Canada's trade relationship with the United States. A central feature of this course is the attention paid U.S. trade law, its operation and impact upon Canada. (3-0)

**LAW 333 (1½) SOCIAL WELFARE LAW**

This seminar is designed to help students develop an understanding of the role of law, lawyers, and the legal system in addressing the problem of economic disadvantage. Topics include the origin and development of the Canadian welfare state, case studies of the issues of work, housing and income security, and the practice of poverty law as a strategy for change. (3-0)

**LAW 336 (1-1½) COLLECTIVE AGREEMENTS: NEGOTIATION AND ARBITRATION**

A study of the negotiation and administration of collective agreements in the private sector. Topics will include labour negotiation theory, bargaining structure, grievance resolution, contract interpretation, individual rights and the role of the Labour Relations Board. (2-0)

**LAW 337 (1 or 1½) DISPUTE RESOLUTION: THEORY AND PRACTICE**

This course will examine the forms and functions of major disputing processes — mediation, negotiation and adjudication. These are the processes which are critical to lawyers and other persons concerned with preventing or resolving disputes. Both court adjudication and alternative dispute resolution (ADR) will be studied from theoretical, critical and practical perspectives. The course will also examine and develop the skills used in various dispute resolution procedures. (2-0) or (2-1)

**LAW 339 (1½) LEGAL THEORY WORKSHOP**

This seminar explores the interdisciplinary nature of legal studies by considering the contributions of 20th century social theory to legal thought. Topics which will be canvassed include analyses of law and legal systems from sociological, economic and philosophical perspectives. (3-0)

**LAW 341 (1½) HISTORICAL FOUNDATIONS OF ABORIGINAL TITLE AND GOVERNMENT**

This seminar introduces students to the issues of aboriginal title and self-government in their historical context. The focus is upon common law, constitutional and statutory law in relation to aboriginal title and rights, but reference is also made to the treaty process, reserve lands and hunting and fishing. Although the course deals with all parts of Canada, the emphasis is upon British Columbia. (3-0)

**LAW 342 (1½) IMMIGRATION AND REFUGEE LAW**

This course examines immigration and refugee law, policy and practice. Topics considered include the historical perspective, constitutional jurisdiction, the admission of immigrants, visitors and refugees, exclusion and removal, the acquisition of citizenship and the process of inquiries, appeals and judicial review. Relevant aspects of international law are covered. Students will be given an opportunity to consider immigration and refugee law from a comparative perspective, with particular focus on the Asia-Pacific region. (3-0)



**LAW 343 (1-2) CONTEMPORARY ISSUES IN LAW**

This course is concerned with legal issues which are contemporary and problematic. Each issue will be examined in the light of existing legal rules, social and related implications, the legal process, and possible reform. (The unit value of the course may vary from 1, to 1½, to 2 units per term. Students may take the course for credit more than once.

(2-0) to (4-0)

**LAW 344 (1½) INSURANCE LAW**

The course will examine the theory and elements of the practice of insurance law, with reference to the most common forms of both first party and third party insurance: property, life and motor vehicle insurance.

(3-0)

**LAW 345 (2) TAXATION**

The course will strive to cover the basic principles of income tax law including such issues as taxable income, residence income from employment, business or property, and capital gains. It will also deal in a general way with policy underlying certain aspects of the Income Tax Act and will provide an introduction to certain specific provisions of that Act, concentrating primarily on personal income tax law.

(4-0)

**LAW 346 (1 or 1½) ADVANCED TAXATION**

This course builds upon the concepts studied in Taxation (345) and is concerned primarily with the Income Tax treatment of business organizations, particularly corporations and partnerships, and their investors.

(2-0)

**LAW 347 (1½) INTELLECTUAL PROPERTY**

A study of the concept of intellectual property and the principles and policies of selected areas of intellectual property law, primarily: (a) registered trade marks and related common law provisions and (b) copyright in its categories of "literary", "dramatic", "musical", and "artistic" works and with a focus upon new technologies such as photocopying, videotaping and computer programming. In addition, the course includes a brief introduction to the law and policies of patents, industrial designs and confidential information. Where appropriate, attention is drawn to the interrelationship and boundary issues between the categories that together comprise the subject of intellectual property.

(3-0)

**LAW 350 (7½) CLINICAL TERM**

Clinical legal education is predicated upon the assumption of a recognized role within the legal system by the law student. The experience gained from the participation in the role becomes the focus for reflection and examinations of substantive legal rules, procedural and strategic positions, and introspective critical analysis of the role of the lawyer in the legal process. This requires a carefully supervised program with manifold opportunities for one to one instructor student supervision and regular group sessions. Programs envisaged would take place in a community law office.

350A (7½) Community Law-Legal Aid Clinic

(Grading: COM, N or F)

(15-0)

**LAW 351 (5½-7½) PUBLIC LAW TERM**

This course will provide a forum for the development of a comprehensive understanding of the nature of policy formulation and decision making in governmental departments and agencies as well as the role of the lawyer in the context of the administrative and legislative processes. The course will focus on selected areas of governmental activity and will examine the evolution of public law and the conflicting values involved in the regulation of contemporary society, the emerging dominance of the executive branch of the government and the professional responsibility of the lawyer as advocate, legislator, counsellor, lobbyist, administrator and policy adviser. A clinical placement may be arranged for each student.

(11-0) to (15-0)

**LAW 352 (6-8) EXCHANGE LAW TERM**

With the permission of the Dean, or his or her designate, where the Faculty of Law has entered into an exchange program or agreement with another law faculty in Canada or elsewhere, a student may be allowed to enroll in this term, for up to 8 units towards his or her LL.B. degree at the University of Victoria. The terms and conditions of a student's enrollment in an exchange term, the number of credits for which the student may be enrolled, and the requirements for successful completion of term are governed by the regulations adopted by the Faculty for this program.

(Grading: COM, N or F)

**LAW 355 (2) LEGAL SKILLS**

The course uses materials from substantive law to examine and develop the skills of the lawyer in interviewing, counselling and negotiating.

(Grading: COM, N, or F)

(4-0)

**LAW 356 (2) ADVOCACY**

This course will involve a critical analysis of the trial process including the demonstration and evaluation of various techniques of advocacy and their relationship to the law of evidence and procedure. In particular, the objectives and techniques of pretrial motions, examinations for discovery, examination and cross examination of witnesses, exhibits, and the presentation of legal argument will be considered.

(Grading: COM, N, or F)

(4-0)

**LAW 359 (1½) CIVIL LIBERTIES AND THE CHARTER**

This course will examine the relationship between government and the individual. The major emphasis will be upon the development and protection of civil liberties and human rights in Canada. Reference may also be made to Human Rights Legislation and International Agreements.

(3-0)

**LAW 360 (1½) THE LEGAL PROFESSION**

This course is designed to provide students with insights and perspectives into the organization and operation of the legal profession as a vital institution in the legal process. The class will be asked to consider the legal profession in its social context, its formal organization, its ethical procedures, and the role of the lawyer throughout the legal process. It appears to many that the role of the professions in general is changing. A consideration of this issue is focused upon the legal profession.

(3-0)

**LAW 361 (1½) HISTORICAL FOUNDATIONS OF THE COMMON LAW**

The development of English legal systems have had a profound impact on Canada as well. Beginning with 11th century European developments, the course will consider a number of topics, such as Anglo-Saxon England and the Norman Conquest, the development of common law and equity, criminal law and 19th century developments, ending with some analysis of the "reception" of English law in the colonies.

(3-0) or (2-1)

**LAW 362 (1½) CANADIAN LEGAL HISTORY**

This course addresses a series of selected themes in Canadian Legal History, especially the theoretical diversity of Canadian legal historiography and the place of Legal History within the broader context of Canadian political, social, economic, cultural and intellectual history.

(3-0)

**LAW 363 (1½) CONFLICT OF LAWS**

This course seeks to illustrate problems arising out of the interaction of laws and legal systems. Such important questions as choice of law, recognition of foreign judgments, doctrines of domicile and renvoi will be investigated in order to develop an understanding of the choices and values inherent in decision making in this area.

(3-0)

**LAW 365 (1-2) LEGAL MOOTING**

A student may be awarded credit in the second and third years of the student's program to a maximum of 2 units in either year and 2½ units in the student's entire program for supervised participation in interuniversity mooting competitions designated by the Dean.

(Grading: COM, N, or F)

(2-0) to (4-0)

**LAW 369 (1½) FEMINIST LEGAL THEORIES**

This seminar explores critiques of law and legal reasoning from several feminist perspectives. Topics which will be examined include feminist critiques of liberal legal theory, anti-racist feminism and legal analysis, feminist epistemologies and legal reasoning, and feminist theories regarding women's relationships to law and to the state.

(3-0)

**LAW 370 (1½) ASIA-PACIFIC LAW**

The theory and methodology of Comparative Law will be introduced and then the historical, cultural, political, economic and other factors of legal development in four major areas of the Asia-Pacific Region will be explored: Northeast Asia, Southeast Asia, South Asia and the Southwest Pacific. ASEAN countries will be considered in more detail. The final part of the course will focus on one or two areas of the law, such as criminal law, family law or intellectual property, and on one or two selected countries.

(3-0)



**LAW 388 (1½) ADVANCED LEGAL RESEARCH & WRITING**

This course will build upon the research and writing skills learned in the first year. Students will explore a wide range of research sources, both legal and nonlegal, including computer assisted legal research. Students will analyse various types of legal writing. The importance of context, organization and audience in legal writing will be stressed. Parts, sections or clauses of written documents will be analyzed, evaluated, criticized, edited and rewritten to improve and develop the students' analytical and writing skills. (3-0)

**LAW 391 (1-2) SUPERVISED GROUP PROJECT**

Upper year students may undertake a program of supervised group study as a basis for working through some common interest in law. Groups will ordinarily have a maximum of twelve members. They will be formed on the students' initiative but will require the agreement of a faculty member to act as the project supervisor. Students who are contemplating the formation of a group are responsible for designing a project proposal and securing a faculty supervisor. They should discuss their plans with the Dean or Associate Dean as early as possible in the academic year prior to the year in which the project will be undertaken

so that the necessary planning can be done and approval secured. All group projects require the written approval of the Dean and may be allowed to extend over two terms. In exceptional circumstances and with the written approval of the Dean, group members may enroll in the course for differing credit values depending on the level of their participation in the project provided that the unit value for each student is determined prior to his or her enrollment in the course. With the permission of the Associate Dean, students may be allowed to enrol in Law 391 more than once to a maximum of 4 units. (2-0) to (4-0)

**LAW 399 (1-4) SUPERVISED RESEARCH AND WRITING**

During either of the second or third years of a student's program, a student may undertake a substantial research and writing project on a legal subject approved by a member of the Faculty of Law who agrees to supervise the project. With the approval of the Dean or the Dean's nominee: (1) a student may be awarded credit for two separate supervised research papers provided that the total credit does not exceed 4 units and each paper is started and completed in separate terms; (2) this course may be extended over two terms; and (3) if this course is to be taken for 1 unit only.



# UNDERGRADUATE SCHOLARSHIPS, MEDALS AND PRIZES

Academic awards for undergraduate study are administered by the Office of the Administrative Registrar. Detailed information on undergraduate awards and application procedures is contained in the Undergraduate Awards Booklet which is available by contacting: the Office of the Administrative Registrar, University of Victoria, Main Floor University Centre Building, PO Box 3025, Victoria, BC, V8W 3P2, telephone (604) 721-8107/8108. Office hours are 8:30 AM to 4:30 PM, Monday through Friday.

## GENERAL REGULATIONS

All undergraduate awards adjudicated by the University of Victoria are administered by the Senate Committee on Awards.

To be eligible for any scholarship offered by the University of Victoria, except the President's Scholarships for Part Time Undergraduate Students, an undergraduate student must take a full year's program. This is defined as 15 units of credit work of which 13 units must be graded. Students in the B.Ed. (Elementary) program enrolled in Year 4 will be eligible for awards based on completion of 15 units of course work, of which 10.5 units are graded using the standard nine-point scale. The standing of students who are registered in more than 15 units of courses will be determined on the basis of the grades of the best 15 units of courses. Physically challenged students whose course load has been reduced on medical advice to fewer than 15 units are eligible to compete for awards administered by the University of Victoria on the basis of reduced course load. Applications should be made to the Administrative Registrar.

Except where the terms and conditions of an undergraduate award specifically state otherwise, award winners must normally return to the University of Victoria in the next winter session and enroll in a full program.

Deferral of an award for up to one year (except Faculty of Law, where up to two years may be permitted) may be granted on written application to the Senate Committee on Awards. Students who enroll in a full program and subsequently withdraw from courses, so that they fall below 15 units, will have the value of their award reduced accordingly if the amount exceeds their assessed fees, and should note that they will only be eligible for part time awards in the following year.

The University reserves the right to limit the amount of money awarded to any student and, if necessary, to reassign awards to other students by reversion.

Undergraduate students are eligible to receive scholarships, awards and prizes to a maximum of \$5,000 a year, except for the Faculty of Law which has a maximum of \$10,000, excluding the value of Summer Employment Scholarships.

Except where the donor directs otherwise, the proceeds of awards issued by or through the University will be applied towards the total tuition fees for the academic year. If the amount of the award or awards exceeds the unpaid fees for the academic year, the excess balance will be paid to the student only if registration in a full course load is maintained.

Other awards, such as medals or book prizes, if not presented directly by the donors or their agents, will be forwarded to the winners upon receipt.

Any award may be withheld or cancelled for any of the following reasons: lack of suitable candidates; failure to meet terms and conditions of the award; withdrawal from the University; withdrawal of the award by the donor.

## DEFINITIONS

- (a) An award is any scholarship, medal or prize.
- (b) A scholarship is a monetary award based on academic merit or excellence in the area to which the award pertains.
- (c) A medal is an award based on academic merit or excellence in the area to which the award pertains.

- (d) A prize is an award in the form of cash or of some tangible object such as a book, based on academic merit or excellence in the area to which the award pertains.

NOTE: Except where noted in the terms of reference, none of the above awards require that the student discharge any duties for the University or any other agency. This applies to awards administered by the University of Victoria only.

## ENTRANCE AWARDS

A large number of entrance scholarships with annual values ranging from \$250 to \$4,500 are offered to students entering the University from secondary schools and community colleges. The Undergraduate Awards Booklet, containing detailed terms of reference for these awards, and scholarship application forms are available at the Office of the Administrative Registrar. These awards include:

**T.S. McPherson Entrance Scholarships** - The University of Victoria offers up to ten scholarships (2 of \$22,500 each disbursed over five years, and 8 of \$15,000 each disbursed over five years) to outstanding students entering undergraduate programs from British Columbia secondary schools or community colleges. Consideration will be given to academic achievement, breadth of interests and leadership qualities. Renewals are subject to continued scholarship standing. Application deadline is February 28.

**The John Locke Malkin Entrance Scholarships** - The University of Victoria offers up to six scholarships (to a maximum of \$22,500 each disbursed over five years) to outstanding students entering undergraduate programs from Canadian secondary schools or community colleges. The scholarships are based on the students' academic achievement. Renewals are subject to continued scholarship standing. Application deadline is February 28.

**President's Entrance Scholarships** - The University of Victoria offers up to 20 scholarships of \$2,500 each to outstanding students entering undergraduate programs from British Columbia secondary schools. Application deadline is April 17.

**President's Regional Entrance Scholarships** - The University of Victoria offers up to 60 scholarships of \$2,000 each to outstanding students entering undergraduate programs from British Columbia secondary schools or community colleges. Application deadline is April 17.

**University of Victoria Entrance Scholarships** - The University of Victoria offers up to 50 scholarships of \$2,000 each to outstanding students entering undergraduate programs from British Columbia secondary schools or community colleges. Application deadline is April 17.

**David Brousson Entrance Scholarship** - One scholarship of \$2,000. Open to outstanding students entering from British Columbia secondary schools or community colleges. Application deadline is April 17.

**The Ian and Gillian Stewart Entrance Scholarship** - One scholarship of \$2,000. Open to outstanding students entering from British Columbia secondary schools or community colleges. Application deadline is April 17.

**The 25th Olympiad Scholarship** - One scholarship of \$2,000. Open to Canadian students demonstrating outstanding athletic achievement while maintaining a high academic standing. Letter of recommendation from sports coach required with application. Application deadline is April 17.

**Faculty of Engineering: Dean's Entrance Scholarships** - A number of scholarships of up to \$2,000 each. Open to students with high academic standing who are entering the Faculty of Engineering at the University of Victoria directly from British Columbia secondary schools or community colleges. Application deadline is April 17.

**The Betty & Gilbert Kennedy Entrance Scholarship in Engineering** - One scholarship of \$2,000. Open to outstanding students entering the Faculty of Engineering at the University of Victoria directly from British Columbia secondary schools or community colleges. Application deadline is April 17.



The West Kootenay Power Scholarship - One scholarship of \$1,500. Open to secondary school students entering the University of Victoria from the West Kootenay region only. Application deadline is April 17.

The Labatt Breweries of British Columbia Limited Scholarship - One scholarship of \$1,000. Open to British Columbia secondary school students only. Application deadline is April 17.

Aldyen Hamber IODE Entrance Scholarship - One scholarship of \$600, two of \$500 and one of \$400. Open to female students only entering from British Columbia secondary schools or community colleges. Application deadline is April 17.

The Brian Williams Memorial Scholarship - Three scholarships of \$500. Open to students from Canadian secondary schools or community colleges who intend to be involved in the UVic rugby program. Letter of recommendation from rugby coach required with application. Application deadline is April 17.

L. & G. Butler Scholarship for the Disabled - One scholarship of \$500. Open to students from Canadian secondary schools or community colleges. Application deadline is April 17.

The C. H. Dowling Memorial Award - One award of \$500. Open to Native Indian students from British Columbia secondary schools or community colleges. Application deadline is April 17.

The Mr. & Mrs. Torquil H. Burns Scholarship - Two scholarships of \$400. Open to students entering the Faculty of Arts and Science directly from secondary schools in School Districts 61, 62, and 63. Application deadline is April 17.

School of Physical Education Scholarship - One scholarship of \$350. Open to students transferring into the School of Physical Education from a college or a university. Application deadline is April 17.

The George W. Nelms Memorial Scholarship - One scholarship of \$350. Open to students entering the Faculty of Arts and Science from secondary schools or community colleges in Northern British Columbia or the Peace River district of Alberta. Application deadline is April 17.

Canadian Union of Public Employees Scholarships - Eight scholarships of \$300. Open to sons or daughters of C.U.P.E. members from the Greater Victoria area only. Application deadline is August 31.

Alexander and Mary MacKenzie Entrance Scholarship - One scholarship of \$250. Open to students entering from secondary school. Recommendation from Director of school or community anti-drug and alcohol program required with application. Application deadline is April 17.

The following music awards are for applicants to the University of Victoria School of Music only. Application deadline is April 17:

J.J. Johannesen Scholarship in Music Performance - One scholarship of \$1,500

The Willard E. Ireland Entrance Scholarship - One scholarship of \$1,300

Performance Scholarship in Music - One scholarship of \$1,100

The Daisie Thirlwall Scholarships in Violin - Up to three scholarships totalling \$1,000

The Gertrude Huntly Durand Memorial Scholarship - One scholarship of \$700

The Harbord Insurance Ltd. Scholarship - One scholarship of \$1,000

Ralph Barbour Burry Memorial Scholarship in Music - Three scholarships of \$800

Douglas Ross Memorial Scholarships - One scholarship of \$425

The Walter J. Fletcher Piano Scholarship - One scholarship of \$450

The Evelyn Marchant MacLaurin Memorial Scholarships in Music - One scholarship of \$1,325

The Herbert and Eva Schaefer String Scholarship - One scholarship of \$1,900

## **AWARDS FOR UNDERGRADUATE STUDENTS ATTENDING THE UNIVERSITY OF VICTORIA**

There are a number of awards available to undergraduate students who attend the University of Victoria in the regular winter session specified in this Calendar. These awards are made available through contributions from corporate and individual donors as well as from the University operating budget. The majority of these awards are assigned on the basis of merit or on nomination by departments, without the need for an application; however, some awards do require that the student apply. Except where the terms and conditions of an undergraduate award specifically state otherwise, award winners must normally return to the University of Victoria in the next winter session and enroll in a full program.

These awards are governed by the general regulations for undergraduate scholarships, medals and prizes. Detailed terms of reference on awards and information on application procedures is contained in the Undergraduate Awards Booklet which is available from the Office of the Administrative Registrar.



# FACULTY OF GRADUATE STUDIES

Gordana Lazarevich, Artist and Licentiate Dip. (Tor.), B.Sc., M.Sc., (Juilliard), Ph.D. (Col.), Dean

C. Robert Miers, B.A. (Knox Coll.), M.A., Ph.D. (Calif., L.A.), Associate Dean

Ann Nightingale, B.Sc., M.P.A. (U. of Vic.), Director, Graduate Admissions and Records

E. Keith Clamp, B.Ed. (Alta.), M.A. (U. of Vic.), Admissions Officer

## EXECUTIVE COMMITTEE:

### Members:

Gordana Lazarevich, Artist and Licentiate Dip., B.Sc., M.Sc., Ph.D., Dean of the Faculty of Graduate Studies, Chair

C. Robert Miers, B.A., M.A., Ph.D., Associate Dean of the Faculty of Graduate Studies

### Representing the Humanities

Terry G. Sherwood, B.A., M.A., Ph.D., Department of English. Term expires October 1995

### Representing Education

Lloyd O. Ollila, B.S., M.A., Ph.D., Department of Communication and Social Foundations in Education. Term expires October 1995

### Representing Engineering

Nedjib Djilali, B.Sc., M.Sc., Ph.D., P.Eng., Department of Mechanical Engineering. Term expires October 1996

### Representing Fine Arts

Linda Hardy, B.A., M.A., Department of Theatre. Term expires October 1995

### Representing Human and Social Development

John J. Jackson, M.Sc., Ph.D., School of Public Administration. Term expires October 1996

### Representing the Sciences

Paul J. Romaniuk, B.Sc., Ph.D., Department of Biochemistry and Microbiology. Term expires October 1995

### Representing the Social Sciences

Nancy L. Galambos, B.S., M.S., Ph.D., Department of Psychology. Term expires October 1995

## REGULATIONS

The regulations shown below have been approved by the Senate of the University of Victoria. Students registered in the Faculty of Graduate Studies are subject to such other general regulations of the University as the Senate or Board of Governors, on the recommendation of the Faculty of Graduate studies, may wish to apply.

The regulations are listed under the following general headings:

- 1.0 Admission
- 2.0 Registration Procedures and Status
- 3.0 Student Responsibility
- 4.0 Academic Standing
- 5.0 Academic Standards for Graduate Degree Programs
- 6.0 Cooperative Education Option
- 7.0 Graduate Programs by Special Arrangement
- 8.0 Appeal Procedure
- 9.0 Research Services
- 10.0 Transcript Requests
- 11.0 Work Permits
- 12.0 Conflict of Interest

## APPROVED GRADUATE PROGRAMS

The Faculty of Graduate Studies of the University of Victoria administers programs leading to the degree of:

|                                   |                                 |
|-----------------------------------|---------------------------------|
| Master of Applied Science         | Master of Nursing               |
| Master of Arts                    | Master of Music                 |
| Master of Business Administration | Master of Public Administration |
| Master of Education               | Master of Science               |
| Master of Engineering             | Master of Social Work           |
| Master of Fine Arts               | Doctor of Philosophy            |

Details of established programs leading to Master's or Doctoral degrees are provided within the departmental listings. Degrees may also be taken with a cooperative education option, with an interdisciplinary focus, or by special arrangement, as outlined below.

### 1.0 ADMISSION

The requirements for admission to the Faculty of Graduate Studies include an academic standing acceptable to the Faculty of Graduate Studies and the department concerned; satisfactory assessment reports; the availability within the department concerned of a supervisor and of adequate space and facilities. Students may enter the Faculty in September, January, May or July; however, some programs have restricted entry points. Departmental entries should be consulted for details.

There is an application fee of \$45. This applies to all applicants — including foreign students. It is non-refundable and will not be credited towards tuition fees. Applications will not be processed unless the application fee is received. Payment must be made in Canadian funds drawn on a Canadian bank, or U.S. funds drawn on a U.S. bank.

Applications for admission must be submitted as early as possible on forms obtained from the Graduate Admissions & Records Office, Main Floor, University Centre. No assurance can be given that North American applications received after May 31, or overseas applications received after December 15 can be processed in time to permit registration in the Winter Session. Individual departments may have earlier deadlines. Applicants who have attended other postsecondary institutions must arrange with those institutions to forward two official transcripts directly to the Graduate Admissions & Records Office. Submission of University of Victoria transcripts is not required; they will be provided by the Graduate Admissions and Records Office. Applicants must arrange to have two assessment reports sent to the same office on forms supplied with the application. These reports are verified on a routine basis. If the Graduate Admissions and Records Office receives evidence that any documentation submitted as part of the application has been forged or falsified in any way, the applicant will be permanently banned from the University of Victoria. A warning will also be circulated to all other Canadian universities.

Applicants for University of Victoria Graduate Fellowships must have all materials submitted to the Graduate Admissions and Records Office by February 15 in order to be guaranteed consideration.

Students who have been admitted to the Faculty of Graduate Studies should confirm within one month that they intend to accept the offered place. If this is not done, then the admission may be cancelled and the place reassigned.

Foreign students should not make travel plans until they have been granted official admission (not provisional admission) and have satisfied all student authorization requirements through the Canadian Consulate in their home country.

### 1.1 English Requirements for Foreign Students

#### 1.1.1 Test of English as a Foreign Language (T.O.E.F.L.)

Applicants for admission whose first language is not English, and who have resided in Canada or other English speaking countries for less than three consecutive years immediately prior to the beginning of the session applied for, must take the Test of English as a Foreign Language (T.O.E.F.L.). The minimum acceptable score is 550. Individual departments may require more than the Faculty minimum; applicants should check with the relevant department. Official offers of admission can only be given after the Graduate Admissions and Records Office has received a copy of the Official Score Report directly from the testing agency. Examinee's Score Records and photocopies are not acceptable. Scores older than two years are not acceptable.

Information concerning the T.O.E.F.L., and the times and places at which it is administered, may be obtained by writing to "Educational Testing Service, Princeton, N.J. 08540, U.S.A.," or by writing directly to "Counselling Services, University of Victoria, P.O. 3025, Victoria, BC V8W 3P2, Canada."



## 1.2 GRE Requirement for Graduate Studies

The Graduate Record Examination (GRE) is prepared and scored by the GRE Board and Educational Testing Service, Princeton, New Jersey. Applications are available from "Graduate Record Examinations, Box 955, Princeton, N.J. 08541" or from "Counselling Services, University of Victoria". It is used widely by Universities to supplement undergraduate records and other qualifications for admission to graduate study.

GRE requirements are prescribed by individual departments. In some instances, completion of the examination is mandatory. Applicants are advised to check department listings for detailed information. However, the Faculty reserves the right to require a GRE score (on Advanced and Aptitude Tests), for any applicant. Voluntary submission of a GRE score may facilitate the admission process.

## 1.3 Admission to Master's Degrees

**1.3.1** In general, an acceptable academic standing will be a baccalaureate degree from a recognized institution (or equivalent from another country). A grade point average of at least 5.00 (B) in the work of the last two years (30 units) leading to this baccalaureate degree is required for entry. Higher entrance standards than those outlined in this section may be set by individual departments.

Practicum and curriculum and instruction (teacher education) courses will not be used in determining an applicant's admission grade point average.

Activity courses, credit granted on the basis of life or work experience, or credit earned at institutions not recognized by the university, cannot be used to satisfy the academic requirement described above, and grades on such courses will not be used in the calculation of the entering grade point average. Any courses used in the calculation of the entering average cannot be used as credit toward a graduate degree program.

**1.3.2** Evidence is required, in the form of two assessment reports, submitted directly to the Graduate Admissions and Records Office from qualified referees, of the student's ability to undertake advanced work in the area of interest.

## 1.4 Admission to the Master's degree as a Mature Student

Five years after completion of a baccalaureate degree as defined in 1.3.1, applicants whose academic record is such that they would not be admissible to a Master's program may be admitted conditionally as mature students, provided they are recommended by the department and have five years of relevant professional experience. Submission of a complete resume will assist in determining eligibility as a mature student. Such recommendations must be made in writing by the Department/School and approved by the Dean of Graduate Studies.

Students admitted in this category cannot receive transfer credit for any courses completed prior to enrolling in the Faculty of Graduate Studies.

## 1.5 Admission to the Doctoral Degree

**1.5.1** Admission to a Doctoral degree program normally requires a Master's degree (or equivalent) from a recognized institution.

**1.5.2** Admission without a Master's degree requires a baccalaureate degree as defined in 1.3.1 from a recognized institution with a cumulative grade point average of 6.50/9.00, or the completion of at least two terms in a Master's programme at this University.

**1.5.3** Transfer from a Master's to a Doctoral program may be recommended to the Dean of Graduate Studies after an evaluation of the candidate by the department concerned. Departmental entries should be consulted for details on the establishment of transfer eligibility. Requests for transfer will be considered at any time after two terms in a Master's program, but if a transfer takes place after student has been in a Master's program for 16 consecutive months from the start of the date of the Master's program, only those fee installments paid during the first 16 months will be applied to the 7.5 fee installments required for the Ph.D.

**1.5.4** Admission to a Doctoral program requires evidence that the applicant is capable of undertaking substantial original research. Such capability will be judged from two assessment reports sent directly to the Graduate Admissions and Records Office from qualified referees, and the completion of a Master's thesis or other scholarly work. Students who are recommended for transfer to the Doctoral program are not required to submit assessment reports.

**1.5.5** All Doctoral students are admitted as provisional candidates until they have passed their candidacy examinations, at which time they are automatically classified as candidates for the degree of Doctor of Philosophy. See regulation 5.8.

## 1.6 Admission to Nondegree Course Work

"Nondegree" graduate students are taking courses in the Faculty of Graduate Studies, but not for credit toward a degree at the University of Victoria. Such students are admitted under one of three categories defined in 1.6.1, 1.6.2 and 1.6.3.

**1.6.1** "Visiting" graduate students on a Letter of Permission which specifies courses allowed for credit toward a graduate degree at another university. Applicants in this category must complete an application for admission and provide a Letter of Permission from their home institution. No other supporting documentation is required.

**1.6.2** "Exchange" graduate students on a Letter of Permission issued by the Dean of Graduate Studies of a western Canadian university under the provisions of the Western Deans' Agreement. If a student is admitted as an "exchange" student, all tuition fees will be waived; however, student fees will still be charged. Applicants under this category must submit a completed application for admission and documentation from the Dean of Graduate Studies at their home institution certifying the applicant as an "exchange" student under the provisions of the Agreement. Courses to be taken toward their degree must be specified in the documentation. No other supporting material is required.

**1.6.3** "Nondegree" students who wish to improve their academic background. Applicants must meet the entrance requirements and follow the application procedure as outlined in 1.0 and 1.3.

**1.6.4** If a student admitted as a nondegree student is later admitted to a graduate degree program, no more than 3.0 units of course work taken as a nondegree student may be applied to the graduate program subject to the recommendation of the supervisory committee and the approval of the Dean of Graduate Studies.

**1.6.5** None of the fees paid as a nondegree student may be applied to the graduate degree. Fees for courses taken as a nondegree student will be charged on a per unit basis as outlined in the section entitled "FEES FOR GRADUATE PROGRAMS" (with the exception of Exchange students as described in 1.6.2 above).

## 1.7 Admission to a Second Master's or Second Doctoral Degree

A student who has a Master's or Doctoral degree from the University of Victoria or the equivalent from a recognized institution may be allowed to pursue graduate studies leading to a second Master's or Doctoral degree provided:

**1.7.1** The student must be admissible to the program.

**1.7.2** The principal academic emphasis of the second degree must be distinct from that of the first degree.

**1.7.3** At least 15 (for the Master's degree) or 30 (for the Doctoral degree) units of credit must be completed beyond those units required in the previous degree.

**1.7.4** The student must meet all program and graduation requirements for the second degree beyond those required for the first degree.

**1.7.5** Graduate degree programs within the Faculty of Graduate Studies cannot be taken concurrently.

**1.7.6** None of the research done for the first degree shall be used for the second degree; as well, the supervisor for the first degree cannot be nominated to supervise the second degree.

**1.7.7** None of the time spent in residence for the first doctoral degree shall count toward the residency requirement for the second doctoral degree.

## 1.8 Permission for Undergraduates to take Graduate Course Work

Students in their final year of a Bachelor's degree program at the University of Victoria who have a grade point average of at least 6.00 (B+) in the last 15 units of course work attempted may be permitted to register in a maximum of 3 units of graduate courses on the recommendation of the department concerned and with the consent of the Dean of Graduate Studies. Such courses cannot be used for credit if this work has been used to satisfy the requirement for another credential.

No application for admission or supporting documentation is required; the graduate advisor of the department in which the courses are to be taken must send a recommendation to the Dean of Graduate Studies, specifying the courses selected. When written permission is



received from the Dean, the approved graduate courses will be added to the undergraduate record.

### 1.9 Auditing Graduate Courses

An individual who is either a graduate student or holds a baccalaureate degree and is recommended to the Faculty of Graduate Studies by a department, may be permitted to audit up to 3 units of graduate courses in a session. A continuing student should add the audit courses to the registration form; a new applicant taking courses for audit only should submit a completed Auditor Entry Form, as well as proof of degree conferral. Registration as an Auditor is subject to the following conditions:

**1.9.1** Admittance to the class is dependent on the class size and other factors that the instructor and the department establish.

**1.9.2** The degree of participation in the course is at the discretion of the department.

**1.9.3** Attendance and participation shall grant no entitlement to an academic record of such attendance and shall not be considered as meeting admission, prerequisite or course requirements for any graduate program.

**1.9.4** The fee, shown in the fee schedule in the Calendar, is payable at the end of the month in which the auditor registers, and is refundable according to Faculty deadlines. Audit fees are extra to tuition fees.

### 1.10 Upgrading for Admission to Graduate Study

**1.10.1** Faculty Admission Requirements Satisfied but Course Background Inappropriate or Prerequisites Lacking

Upon the recommendation of the Department concerned, the Dean may approve the inclusion of the missing background or prerequisites as part of the requirements for the Master's or Doctoral degree. Alternatively, upon the advice of the Department, a provisional offer of admission may be given, subject to satisfactory completion of recommended courses.

#### 1.10.2 Pre-Entry Program

Those applicants who have completed a baccalaureate degree as defined in 1.3.1, but whose academic record is such that they are not admissible to a Master's program may be considered for a Pre-Entry program. Upon the recommendation of the Department concerned, the Dean may approve a pre-entry program consisting of a minimum of six units of undergraduate course work numbered at the 300 or 400 level. This course work must be relevant to the proposed field of study, and must be completed within the time frame specified in the approved program. An average of not less than 6.00 (B+) must be achieved in the course work, and no course be completed at a level below 4.00 (B-).

Students approved by the Dean for this pre-entry option are guaranteed admission to the Faculty of Graduate Studies upon successful completion of the recommended courses. None of the courses in the pre-entry program may be considered for transfer credit towards the graduate program.

#### 1.10.3 Independent Upgrading

Those applicants with an undergraduate degree as defined in 1.3.1 whose grade point average is below the Faculty of Graduate Studies minimum may complete additional senior undergraduate coursework to strengthen their application. If, after completion of additional courses, the applicant is admitted, those courses are not eligible for transfer credit towards the graduate program.

Those applicants with an undergraduate degree as defined in 1.3.1 whose grade point average is above the Faculty of Graduate Studies minimum, but who lack prerequisite or background courses, may complete additional undergraduate coursework to strengthen their application. If admitted, upon the recommendation of the student's supervisory committee, those courses may be eligible for transfer credit towards the graduate program, subject to the limitations in Section 5.1.7.

## 2.0 REGISTRATION PROCEDURES AND STATUS

**2.1** All students admitted to the Faculty of Graduate Studies must normally register by touchtone telephone or as otherwise indicated in the Registration Guide during the dates specified for such registration. All Letters of Admission and Authorizations to Reregister that are not used to register in the term or session to which they apply are automatically cancelled. Students who are issued a Letter of Admission or Authorization to Reregister for September may not use this document for entry in January, May, or July.

## 2.2 Continuity of Registration

All students are required to either register in every term from the time of admission until the requirements of the degree have been met, or formally withdraw in accordance with regulation 2.9 below.

**2.2.1** Students who do not register or formally withdraw in every session will be considered to have abandoned their program and that program will be terminated. The notation "Withdrawn Without Permission" will be entered on their permanent record. Except in extraordinary situations, Abandoned/Terminated programs will not normally be reactivated.

**2.2.2** Students who wish to have their Abandoned/Terminated program reactivated must do so by submitting a letter of appeal to the Dean of Graduate Studies. Readmission requires the approval of both the Department/School concerned and the Faculty of Graduate Studies. Readmission does not guarantee that any courses or fee installments from the Abandoned/Terminated program will be allowed to transfer to the new or reactivated program. In all cases the time spent "Withdrawn Without Permission" will be counted against the total allowable time outlined in regulation 5.2. A reinstatement fee will be assessed.

## 2.3 Reregistration

Students who were registered or temporarily withdrawn (under Section 2.9.1) in the most recent session at the University may be authorized automatically for reregistration without the submission of an application. Students who have otherwise withdrawn and wish to return, or students who are changing their degree program will be required to complete an Application to Reregister. Forms are available through the Graduate Admissions and Records Office.

Students who have registered at another university or college since last in attendance at the University are required to state the names of all educational institutions of postsecondary level attended and to submit two official transcripts of their academic records at these institutions to the Graduate Admissions and Records Office at least eight weeks prior to the start of classes.

## 2.4 Late Registration

The period for late registration in the Winter Session is the first ten days of classes; in Summer Studies, the first two days of classes. Permission of the Dean is required for late registration beyond these dates. A late registration fee will be assessed.

## 2.5 Due Dates for Dropping Courses

Students may drop first term courses until the last day of classes in October, and second term and full year courses until the last day of classes in February, provided they submit course change notices to the Graduate Admissions and Records office by the appropriate date (see Calendar dates, pp. 3-4). Any failure to do so will result in the student receiving a failing grade (N) for the course. *Students should note that fee refund deadlines for the Faculty differ from the course drop deadlines (see Calendar dates, pp. 4-5).*

**2.6** Students may not take or receive credit for courses in which they are not registered, and may not drop courses after Faculty deadlines without permission of the Dean.

## 2.7 Definition of Full Time and Part Time Status

**2.7.1** A student registered for the entire Winter Session (September to April) is defined as full time if

- (a) enrolled in courses totalling a minimum of 6 units; or
- (b) enrolled in a dissertation (699), thesis (599), project (598), or cooperative education work term (800+) during any part of the Winter session.

A part time student is defined as any student who does not fall into category (a) or (b) above.

Registration changes for either term (September to December or January to April) may affect the full/part time status for the entire Winter session.

**2.7.2** A student registered for Summer session (May to August) or a single term in Winter session (September to December OR January to April), is defined as full time if:

- (a) enrolled in courses totalling a minimum of 3 units; or
- (b) enrolled in a dissertation (699), thesis (599), project (598), or cooperative education work term (800+).



A part time student is defined as any student who does not fall into category (a) or (b) above.

*Students should note the additional restrictions concerning hours of work which are applied to award holders in the Faculty of Graduate Studies. Please consult the regulations governing eligibility for Faculty awards, available from the Dean's office.*

## 2.8 Maximum Academic Load

Maximum academic load in the Faculty of Graduate Studies during any one of the first term, second term, or Summer Studies is 9 units of course work or 7½ units of course work plus thesis, dissertation, or project. Maximum academic load for students registered in the entire Winter Session is 18 units of course work or 15 units of course work plus thesis, dissertation, or project. Departments may limit students to fewer units.

A graduate student may not in any term or session be enrolled in courses such that the sum of the units for each course divided by the number of weeks over which the course extends is greater than one unit per week.

## 2.9 Withdrawal from the University

Students in degree programs who wish to withdraw must do so formally. Temporary withdrawal as described in 2.9.1 is handled by the Graduate Admissions and Records Office. Other requests for withdrawal must go to the Office of the Dean of Graduate Studies.

**2.9.1** Students may withdraw on a temporary basis by simply using telephone registration, a Registration Form or Academic Change Notice to declare their intentions. This is effective for one session only. Students must register for the next session or withdraw again, if permissible, or they will be "Withdrawn Without Permission" (see regulation 2.2). A student may withdraw temporarily for no more than three (3) terms in a Master's program, and no more than six (6) terms in a Doctoral program. Students cannot be undertaking any academic or research work nor be using any of the University's facilities during the period of temporary withdrawal.

**2.9.2** Students who wish to withdraw from the Faculty of Graduate Studies, and have their record indicate that they were in good standing when they withdrew, must apply in writing to the Dean, with a supporting memo from their supervisor. The notation "Withdrawn With Permission" will be placed on their permanent record.

**2.9.3** Time spent in "temporarily withdrawn" or "withdrawn without permission" status is counted as part of the total time allowed for completion of the degree programme (see regulation 5.2). All exceptions must be approved by the Dean.

**2.9.4** Nondegree and auditing students may cancel their registration at the University by telephone registration or submitting an Academic Change Notice to the Graduate Admissions and Records Office before the specified deadlines for dropping courses.

## 2.10 Letter of Permission for Studies Elsewhere

Students currently registered in a graduate program who wish to undertake studies at another institution for transfer credit toward their graduate degree at this University must apply in writing to the Dean of Graduate Studies, specifying the host institution, the exact courses and their unit values. The application must be supported by the supervisor. Students may be required to provide supporting information such as a calendar description or course syllabus. If permission is granted, the student must either temporarily withdraw, or register concurrently in a comprehensive exam, project, thesis, dissertation or a Coop Work Term, at the University of Victoria. Students must make arrangements for an official transcript to be sent directly to Graduate Admissions and Records upon completion of the coursework.

## 2.11 Western Deans' Agreement

Students currently participating in a graduate program who wish to undertake studies at a western Canadian university for transfer credit toward their graduate degree at the University of Victoria, may be eligible for "exchange" status under the provisions of the Western Deans' Agreement. Students must follow the procedure described under 2.10, specifying that the application is made under the Western Deans' Agreement. Detailed information on eligibility is available from the Graduate Admissions and Records Office. If the student is approved as "exchange", the university concerned will be notified by the Dean of Graduate Studies and all tuition fees applicable will be waived by the host institution. Student fees, however, may still apply. All students

attending other institutions under the provisions of the Western Deans' Agreement must register concurrently in a comprehensive exam, project, thesis, or dissertation at the University of Victoria, where normal tuition fees will be assessed.

## 2.12 Concurrent LL.B./M.P.A.

With concurrent registration in both the Faculty of Law and the Faculty of Graduate Studies, students approved for this program may work towards the LL.B. and M.P.A. degrees simultaneously. Separate degrees will be awarded upon completion of the requirements applicable to the particular degree. Because of the wide variety of academic backgrounds of applicants, degree programs may vary from student to student.

**2.12.1** There is no common application form or registration process. All must apply separately to the Faculty of Graduate Studies and the Faculty of Law, and be admitted in accordance with the existing policies of each. Once admitted, students in the concurrent program must register separately in each Faculty.

**2.12.2** Students will register in both degrees concurrently. The academic records of students in the combined program will be maintained separately for each Faculty. Therefore, only those grades for courses which appear on the Faculty of Graduate Studies record will be used for the purposes of making Graduate Studies awards, determining adherence to the Faculty of Graduate Studies academic performance regulations, and assessing fees.

**2.12.3** Fees for the Graduate Studies portion of the combined program will be assessed in accordance with existing regulations. Participants in the concurrent program must pay the total number of fee installments required of a student in the regular M.P.A. program. Fees for the Faculty of Law will be assessed in accordance with the regulations for that Faculty. Students who are uncertain about their fee obligations under the combined program are advised to contact the Faculty of Law and the Graduate Admissions and Records Office. (See FEES FOR GRADUATE STUDENTS for details regarding the reregistration fee).

**2.12.4** Only students in an approved concurrent LL.B./M.P.A. degree program have the permission of the Dean of Graduate Studies to register in concurrent degree programs. If, at any time, a student terminates participation in the concurrent degree program, permission does not extend to pursuing any other degree concurrently with a graduate degree.

## 2.13 Registration after Oral Examination

After successful completion of the final oral, or the comprehensive examination for a Master's Degree Without Thesis, students are not permitted to be enrolled in courses in the Faculty of Graduate Studies except as indicated below:

- (a) registration in thesis or dissertation courses as required by the Faculty;
- (b) registration in courses required for the student's approved degree programme;
- (c) registration as a properly authorized non-degree student (see regulation 1.6);
- (d) registration approved by the Dean.

A student registered in courses other than a) to d) above will automatically be dropped from all such courses upon notification of successful completion of the examination to the Graduate Admissions and Records Office.

## 3.0 STUDENT RESPONSIBILITY

**3.1** Students are responsible for making themselves familiar with the general Calendar regulations of the Faculty of Graduate Studies. If students are unsure about any aspect of the Faculty regulations, they should contact the Graduate Admissions and Records Office.

**3.2** Students are responsible for making themselves familiar with the departmental requirements and deadlines. If students are unsure about any aspect of the departmental regulations, they should contact the Graduate Advisor in their department.

**3.3** Students are responsible for ensuring that their courses have been chosen in conformity with the Faculty and departmental regulations. Students are also responsible for ensuring the completeness and accuracy of their registration.



Any discrepancy between the program they are following and the Calendar regulations, or discrepancy between the program they are following and that recorded in the Graduate Admissions and Records Office must be reported promptly to the Graduate Admissions and Records Office. Students should also inform their academic supervisor, supervisory committee and departmental graduate studies advisor that they have reported the matter.

Discrepancies can often be detected by examining the document called the "Authorization to Re-register" or the "Program Audit and Degree Review" form that is sent in all registration packages. If students are unsure about any aspect of their record, they should contact the Graduate Admissions and Records Office.

**3.4** Students are responsible for making themselves familiar with their fee obligations as outlined in the fee regulations. If students are unsure about any aspect of the fee regulations, they should contact the Graduate Admissions and Records Office. Do not contact Accounting Services with questions about fee regulations for Graduate Studies.

**3.5** Students are equally responsible for maintaining open communication with their academic supervisor, supervisory committee, and departmental graduate studies advisor through mutually agreed upon regular meetings. Any problems, real or potential, should be brought to the attention of the academic supervisor, supervisory committee and departmental graduate studies advisor promptly. Students should be aware that formal routes of appeal exist in the form of the "Appeals Procedures of the Faculty of Graduate Studies." (see regulation 9.0)

**3.6** A letter mailed to a student's address as it appears on record in the Graduate Admissions and Records Office will be deemed adequate notification to the student for all matters concerning the student's record. Changes in address and telephone number must be reported promptly to the Graduate Admissions and Records Office.

### 3.7 Medical Requirement

The University, through Health Services, may require a student to take a medical examination at any time during attendance at the University. This measure exists to safeguard the medical welfare of the student body as a whole.

Students who are not residents of Canada are required to produce evidence of adequate sickness and hospital insurance coverage before registration can be considered complete. Such students are not eligible for insurance coverage through the Province of British Columbia, and must obtain coverage through a private company prior to registration. Further information is found under Health Services, page 29.

## 4.0 ACADEMIC STANDING

### 4.1 Faculty of Graduate Studies Grading System:

| Passing Grades:   | Grade Point Value: |  |
|---|--------------------|--|
| A+  | 9                  |  |
| A   | 8                  |  |
| A-  | 7                  |  |
| B+  | 6                  |  |
| B   | 5                  |  |
| B-  | 4                  |  |
| C+  | 3                  |  |
| C   | 2                  |  |
| D   | 1                  |  |
| *COM  | N/A                | Complete   |
| Failing grades: (no supplementals offered in the Faculty of Graduate Studies) |                    |  |
| F   | 0                  |  |
| *N  | 0                  | Did not write examination or otherwise complete course requirements by the end of the term of session. |
| Temporary Grades:   |                    |  |
| *INC  | N/A                | Incomplete   |
| *INP  | N/A                | In Progress  |
| *CIC  | N/A                | Coop Interrupted Course  |

\*COM — used only for 0 unit graduate courses and those graduate courses designated by the Senate. Such courses are identified in the course listings.

\*INC — used for those graduate credit courses designated by the Senate and identified in the course listings; also used, with Dean's permission, for those graduate credit courses with regular grading (A to F, including N) which are not complete by the end of the term or session due to exceptional circumstances beyond the control of the instructor or student. INC must be replaced by a final grade not later than two months after the end of that term or session.

\*INP — used only for: seminars offered on the same basis as dissertations or theses and designated by Senate (identified in the course listings); work terms; dissertations; theses; projects; comprehensive examinations. In the case of work terms, a final grade must replace INP within two months of the end of term; for dissertations, theses, designated seminars, projects and comprehensives, a final grade must replace INP by the end of the program. If the student does not complete the degree requirements within the time limit for the degree, the final grades will be N.

\*N — in exceptional circumstances, the Dean may authorize the removal of an N grade and the replacement of it by another grade. In accordance with Senate regulations, an instructor shall advise students at the beginning of the term or session of the circumstances under which they would be assigned a grade of N.

### 4.2 Course Challenge

With the exception of the M.P.A. foundation courses, graduate course challenge is not allowed in the Faculty of Graduate Studies.

### 4.3 Duplicate Courses

In the case of duplicate courses (DUP), both grades will be used in the calculation of the sessional and cumulative grade point average, provided they are not designated as FNC, (For No Credit).

## 5.0 ACADEMIC STANDARDS FOR GRADUATE DEGREE PROGRAMS

### 5.1 Course and Program Requirements

#### 5.1.1 Minimum degree requirements

The minimum requirement for a Master's degree is 15 units of work, and satisfactory completion of the prescribed program.

The minimum requirement for the degree of Doctor of Philosophy is 30 units of work beyond the Master's level or 45 units beyond the Bachelor's level, and satisfactory completion of the prescribed program.

ADMN 500-516 can be taken for credit in the M.P.A. program only. These courses will be designated "For No Credit (FNC)" for all other students.

#### 5.1.2 Graduate Programs

Within the first session of attendance in a graduate degree program, a supervisor will be nominated and a completed graduate program form will be forwarded to the Faculty of Graduate Studies by the graduate adviser on behalf of each student. Unless otherwise specified, the remainder of the prescribed supervisory committee will be nominated and names forwarded to the Faculty by the graduate adviser, within two sessions of the first registration in the thesis, project or dissertation.

#### 5.1.3 Course Work, Research and Dissertation Quality

Considerable variation is permitted in the balance between research and the course work required for the Master's degree, although most programs include a thesis based on research. (See 5.1.5 Master's Degree Without Thesis)

The Doctoral program requires that a broad knowledge of the field or fields of study be demonstrated through the candidacy examination. The major portion of the Doctoral program will be devoted to a research project culminating in a dissertation which satisfies the requirements and standards of the Faculty of Graduate Studies.

The doctoral dissertation must embody original work and constitute a significant contribution to knowledge in the candidate's field of study. It should contain evidence of broad knowledge of the relevant literature, and should demonstrate a critical understanding of the works of scholars closely related to the subject of the dissertation. Material embodied in the dissertation should, in the opinion of scholars in the field, merit publication.

The general form and style of dissertations may differ from department to department, but all dissertations shall be presented in a form which constitutes a connected and continuous text. The dissertation may



include materials already published by the candidate, whether alone or in conjunction with others. Previously published materials must be fully integrated into the dissertation while at the same time distinguishing the student's own work from the work of other researchers. At the final oral examination, the doctoral candidate is responsible for the entire content of the dissertation. This includes those portions of co-authored papers which comprise part of the dissertation.

When research is completed, and before the thesis or dissertation is written, the student should contact the Graduate Admissions and Records Office for a copy of the Thesis/Dissertation Guidelines, which specify academic and technical requirements to ensure acceptability of the paper by the University and the National Library. *The Special Collections Assistant in the McPherson Library should be consulted if students require additional advice on technical requirements specific to the individual paper.*

#### 5.1.4 Minimum Graduate Component of Master's Degree

A Master's candidate must complete a minimum of 12 units of graduate credit out of the total units required for the degree. Individual departments may require a higher number of units at the graduate level. Courses numbered at the 100 and 200 level may be included in the program as prerequisites but will be indicated on the student record as FNC (for no credit on a graduate program); as well, courses indicated on the record as FNC will not be included in sessional or cumulative grade point average calculations.

ADMN 500-516 can be taken for credit in the M.P.A. program only. These courses will be designated FNC for all other students.

#### 5.1.5 Master's Degree Without Thesis

All regulations pertaining to such programs are contained in the document "Regulations for a Master's Degree Without Thesis" which may be obtained from the Dean of Graduate Studies Office.

Not all departments offer the option of Master's degree without thesis.

- (a) A program form must be completed as for all other graduate degrees.
- (b) A supervisory committee shall be formed according to 5.7
- (c) Unless approved by Senate there must be evidence of independent research work which may be in the form of a project, extended paper(s), work report, etc. The credit value for this work may range from 1.5 to 4.5 units.
- (d) There shall be a formal evaluation of the degree. The department may require a written comprehensive examination in place of, or in addition to, an oral examination. If an oral examination is conducted, it shall be done so in accordance with regulations 5.9.2. and 5.9.4.

Regulations pertaining to written comprehensive examinations are contained in the document "Regulations for a Master's Degree Without Thesis".

#### 5.1.6 Language Requirements

Master's or Doctoral programs may require a reading knowledge of one or more languages other than English. Language requirements will be prescribed for individual students by the supervisory committee according to departmental regulations (see departmental entries). Such requirements are considered part of the student's program. When a language requirement is imposed, it must be met prior to taking the oral examination or, in the case of nonthesis Master's programs, before the completion of the comprehensive examination and/or the project oral.

#### 5.1.7 Applicability of Transfer Credit

On the recommendation of the department or school concerned, the Faculty of Graduate Studies may accept courses taken at other accredited and recognized post-secondary institutions or at the University of Victoria for credit in a graduate program. However, at least half of the program units must be completed as a degree candidate in the Faculty of Graduate Studies at the University of Victoria.

Courses taken at the University of Victoria in other faculties, or as a nondegree student in the Faculty of Graduate Studies, may be considered for transfer to a graduate degree program (see regulation 1.6.4).

In order to qualify for transfer, courses must meet all of the following conditions:

- (a) must be a graduate or senior undergraduate level course;
- (b) must be completed with a grade of at least B (or equivalent); courses graded Pass/Fail or equivalent are not acceptable;
- (c) must not be used to meet the minimum admission standards of the Faculty of Graduate Studies;

- (d) must not have been used to obtain any degree, diploma, certificate, or other credential.

The grades from courses allowed for transfer credit will not appear on the Faculty of Graduate Studies transcript, and they will not be used in determining sessional or cumulative grade point averages. Credit granted at another institution on the basis of "life" or "work" experience is not acceptable for transfer credit. For students admitted as Mature Students (see regulation 1.4) transfer credit will not be granted for courses taken before enrolling in the Faculty of Graduate Studies.

#### 5.1.8 Courses for no credit in the Faculty (FNC)

All undergraduate courses at the 100-299 level are automatically designated FNC on the student's record.

Upon the recommendation of the student's supervisor and departmental advisor, the Dean may approve the designation of a senior level undergraduate course (those courses number 300-499) as FNC. Such designation for senior undergraduate courses must be approved at the time of registration. Under no conditions will the Dean approve the application of FNC to a course after the normal course change period has passed. Also, under no conditions will the Dean approve the removal of the FNC designation after the normal course change period has passed.

ADMN 500-516 can be taken for credit in the M.P.A. program only. These courses will be designated FNC for all other students.

### 5.2 Time Limits

**5.2.1** Normally, a student proceeding toward a Master's degree will be required to complete all the requirements for the degree within five years (sixty consecutive months) from the date of the first registration in the Master's degree. In no case will a degree be awarded in less than twelve consecutive months from the time of first registration. Extension of this time limit may be granted by the Dean upon recommendation of the Department or School.

**5.2.2** Normally, a student proceeding toward a Doctoral degree will be required to complete all the requirements within seven years (eighty-four consecutive months) from the date of first registration in the program. If the student has transferred to the Doctoral program after an initial period in a Master's program, completion is required within seven years of the date of the first registration in the Master's program. A degree will not be awarded in less than twenty-four consecutive months from the time of first registration. Extension of this time limit may be granted by the Dean upon recommendation of the Department or School.

**5.2.3** Students enrolled in a cooperative education program at the Master's level will have an additional 8 months added on to the normal completion times noted above; at the Doctoral level, 12 months will be added.

### 5.3 Residence Requirement

**5.3.1** There are no Faculty residence requirements at the University of Victoria for students proceeding to a Master's degree. However, see 5.1.7 and 5.2 above. Departments may set residence requirements.

**5.3.2** Doctoral candidates generally undertake the residence requirement with their first registration in the program. Normally, a student with a Master's degree must register at the University of Victoria and pursue studies under the direction of a faculty member as a full time student for at least one full Winter Session within 24 consecutive months after their initial registration. Normally, a Doctoral student without a Master's degree must register at the University of Victoria and pursue studies under the direction of a faculty member as a full time student for at least two Winter Sessions within 36 consecutive months after their initial registration. Part-time students with permission from their academic supervisor, may request a waiver of this requirement.

### 5.4 Academic Performance

A student who fails to meet academic standards, or whose dissertation, thesis, or project is not progressing satisfactorily, may be required to withdraw from the Faculty of Graduate Studies with the advice and consent of the department concerned.

**5.4.1** Students in the Faculty must achieve a grade point average of at least 5.00 (B) for every session in which they are registered. Individual departments or schools may set higher standards. All students with a sessional or cumulative average below 5.00 will not be allowed to register in the next session until their academic performance has been



reviewed by their supervisory committee and continuation in the Faculty is approved by the Dean.

Grades on courses designated FNC (see regulation 5.1.8) or on Transfer Credit courses will not be used in the calculation of sessional or cumulative grade averages.

**5.4.2** Every grade of C+ or lower in a course taken for credit in the Faculty of Graduate Studies must be reviewed by the supervisory committee of the student and a recommendation made to the Dean of Graduate Studies. Such students will not be allowed to register in the next session until approved to do so by the Dean.

**5.4.3** Conditions may be imposed by the Faculty (upon the advice of the supervisory committee) for continuation in the program; if not met within the specified time limit, the student will be required to withdraw.

## 5.5 Departmental Graduate Studies Advisor

The Departmental Graduate Studies Advisor is the formal liaison officer between the department and the Faculty of Graduate Studies. The Departmental Graduate Studies Advisor makes recommendations to the Faculty of Graduate Studies on the following matters: admission to graduate programs, awards administered by the Faculty of Graduate Studies, changes to the student record including degree program, supervisory committee and registration. Any request for oral examination must also be signed by the Departmental Graduate Studies Advisor. The Departmental Graduate Studies Advisor will normally chair the Departmental Graduate Studies Committee (see 5.6).

## 5.6 Departmental Graduate Studies Committee

The Faculty of Graduate Studies strongly recommends that each department have a Graduate Studies Committee and that this committee be chaired by the Departmental Graduate Studies Advisor (see 5.5). The responsibilities of this committee may include such tasks as admission decisions, curriculum deliberations and administration of candidacy examinations. The Faculty also strongly recommends that the Department Graduate Studies Committee have a graduate student representative.

## 5.7 Academic Supervision

### 5.7.1 Academic Supervisor

Each graduate student shall have a member of the Faculty of Graduate Studies assigned as Academic Supervisor to counsel the student in academic matters. The Academic Supervisor is nominated by the department and approved by the Dean of Graduate Studies.

In particular, the Academic Supervisor must be aware of the calendar regulations and provide guidance to the student on the nature of research, the standards expected, the adequacy of progress and quality of work.

The Academic Supervisor should maintain contact with the student through mutually agreed upon regular meetings, and be accessible to the student to give advice and constructive criticism. Supervisors who expect to be absent from the University for an extended period of time are responsible for making suitable arrangements with the student and the Departmental Graduate Studies Advisor for the continued supervision of the student or for requesting the department to nominate another supervisor. Such absences and the resulting arrangements must be communicated to the Dean of Graduate Studies.

### 5.7.2 Supervisory Committee

Each student shall have a supervisory committee nominated by the department and approved by the Dean of Graduate Studies. The chair of this committee shall be the Academic Supervisor. Unless specifically approved by the Dean, all members of the supervisory committee must be members of the Faculty of Graduate Studies. The duties of the committee include: recommending a program of study chosen in conformity with the Faculty and departmental regulations; supervision of the project, thesis or dissertation; participation in a final oral examination when the program prescribes such an examination. The committee may conduct other examinations, and shall recommend to the Faculty of Graduate Studies whether or not a degree be awarded to a candidate.

The composition of the supervisory committee shall be as follows:

#### (a) Master's Degree With Thesis

The committee shall consist of at least three members including the Academic Supervisor. It is recommended that one member should be from outside the department.

#### (b) Master's Degree Without Thesis

The committee shall consist of at least two members including the Academic Supervisor. The second member may be from outside the department, but must be familiar with the area of study. This person may be outside the Faculty of Graduate Studies, if approved by the Dean.

#### (c) Master's Degree By Special Arrangement (with and without Thesis) (see 7.0)

The committee shall consist of at least three members including the Academic Supervisor. At least one member must be from a department with a regular graduate program and who has supervised successful candidates for graduate degrees.

#### (d) Doctoral Degree

The committee shall consist of at least four members including the Academic Supervisor. At least one member must be from outside the department in which the candidate's research is being carried out.

#### (e) Doctoral Degree By Special Arrangement (see 7.0)

The committee shall consist of at least four members including the Academic Supervisor. Two of the members must be from outside the department, and at least one of these outside members must be from a department with an active Ph.D. program. Both outside members must have had successful experience in Ph.D. supervision.

## 5.8 Doctoral Candidacy Examination

### 5.8.1 General

Within two years of registration as a provisional Doctoral student and at least six months before the final oral examination, a student must pass a candidacy examination. The purpose of the candidacy examination is to test the student's understanding of material considered essential to completion of a Ph.D. and/or the student's competence to do research which will culminate in the Ph.D. dissertation. The candidacy examination may be written, or oral, or both at the discretion of the department.

Individual departments or supervisory committees may also require other examinations in addition to the candidacy examination. Examples of such examinations may include those to test competence in languages other than English, in statistics, in computing, or in other basic research skills.

### 5.8.2 Departmental Guidelines and Responsibility

The candidacy examination is a requirement of the Faculty of Graduate Studies and cannot be waived by any department. However, the precise form, content, and administration of such examinations are determined by individual departments.

While there may be wide variety in the content of candidacy examinations, all such examinations must be consistent within each department. Factors that must be consistent are the manner in which the examinations are constructed, conducted and evaluated. Departments are responsible for ensuring this consistency.

Departments are responsible for providing the student with a written statement of procedures, requirements, and regulations pertaining to all such examinations. This information must be made available to doctoral students as soon as they enter the program. A copy of these procedures must be on file with the Faculty of Graduate Studies.

When a student has successfully completed the candidacy examination(s), the Departmental Graduate Advisor is responsible for sending a memorandum of confirmation to the Graduate Admissions and Records Office. The memorandum must be signed by all members of the Supervisory Committee.

## 5.9 Final Oral Examinations and Examining Committees

### 5.9.1 General Regulations

(a) All Doctoral programs and Master's degrees with thesis require a final oral examination. For Master's degrees without thesis departments may require a written comprehensive examination, or an oral examination, or both.

(b) Students may proceed to an oral examination when the supervisory committee is satisfied that the dissertation or thesis represents an examinable document for the degree requirements. The supervisory committee confirms this by signing the "Request for Oral Examination" form. This form must be submitted to the Dean of Graduate Studies at least four weeks before the anticipated date of the oral examination. Regulations covering the



format of thesis and dissertations may be obtained from the Graduate Admissions and Records Office.

Before proceeding to the oral examination, all courses taken for credit in the Faculty must be completed with a cumulative grade point average of not less than 5.00. Any language requirement must be met before the student proceeds to the oral examination.

- (c) The Dean of Graduate Studies (or nominee) will act as Chair at the final oral examination. Any tenured member of the Faculty of Graduate Studies with extensive experience in the Faculty is eligible to serve as the Dean's nominee. Oral Examinations are open to the public. Notice of examination will be communicated to all faculty members involved, and to each academic department at least 7 days prior to the date of the examination.

### 5.9.2 Examining Committees

For Doctoral programs and Master's with thesis, the role of the examining committee is to assess the dissertation or thesis and to conduct an oral examination based on that dissertation or thesis. For Master's without thesis, the role of the examining committee is to assess the independent work and to conduct an oral examination based on that work. The Examining Committee for a Master's degree without thesis may also evaluate and examine other aspects of the degree such as specified coursework or an understanding of any required reading list (see 5.1.5 Master's Degree Without Thesis).

- (a) Master's Degree With Thesis

The final oral examining committee shall consist of the supervisory committee together with one or more examiners appointed by the Faculty of Graduate Studies from outside the department(s).

- (b) Master's Degree Without Thesis

The final oral examining committee shall consist of the supervisory committee and a chair approved by the Dean of Graduate Studies. Additional examiners may be added as approved by the department(s) and the Dean.

- (c) Doctoral Degree

The final oral examining committee shall consist of the supervisory committee and at least one other examiner from outside the University. Such external examiners are appointed by the Dean of Graduate Studies in consultation with the department(s), and must be authorities in the field of research being examined.

### 5.9.3 Results of Oral Examinations (Thesis and Dissertation)

The decision of the examining committee shall be based on the content of the dissertation or thesis as well as the candidate's ability to defend it. After the examination, the committee shall recommend one of the following results:

- (a) That the thesis is acceptable as presented and the oral defense is acceptable

In this case all members of the examining committee shall sign two copies of the Title Page and two copies of the Abstract Page. The Chair of the Department and the student's supervisor shall sign the department's Letter of Recommendation.

- (b) That the thesis is acceptable subject to minor revision and the oral defense is acceptable

In this case all members of the examining committee except the Academic Supervisor shall sign the documents listed in 5.9.3. a). The Academic Supervisor will sign the documents when the dissertation or thesis has been amended to her/his satisfaction.

- (c) That the thesis is acceptable subject to major revision and the oral defense is acceptable

In this case none of the members of the examining committee shall sign the documents listed in 5.9.3 (a). The Academic Supervisor shall supervise the revision of the dissertation or thesis. If the dissertation or thesis is acceptable to the Academic Supervisor, the Academic Supervisor shall distribute it to the rest of examining committee. If it is acceptable to the committee, the Academic Supervisor shall ensure that each committee member signs the documents listed in 5.9.3 (a). The length of time for the revision shall be agreed upon by the committee and the candidate, but shall not exceed one year from the date of the oral examination.

- (d) That the examination be "adjourned"

This result should not be confused with failure (see e) Failure below). Examples of reasons to "adjourn" the examination include but are not limited to: further research or experimentation

is required; the thesis is acceptable but the student has failed the oral defense; the external examiner casts the lone dissenting vote. In the case of an "adjourned" examination the candidate shall not be passed and no member shall sign the documents listed in 5.9.3 a).

When an examination is "adjourned," each member of examining committee shall make a written report to the Dean of Graduate Studies within 14 calendar days of the date of the oral examination. After reviewing these reports the Dean sets a date for reconvening the examination. The Dean shall also determine whether or not the composition of the original committee is appropriate for the reconvened examination. The date for reconvening shall be no later than six months from the date of the first examination.

- (e) Failure

If two or more members of the examining committee are opposed to passing the student, the student will not be recommended for the degree. In this case, the committee shall make a written report to the Dean within 14 calendar days of the date of the oral examination outlining the reasons for this decision. A student who fails the oral examination has the right to appeal and should consult with the Dean of Graduate Studies regarding the appropriate procedures.

### 5.9.4 Results of Oral Examinations (Master's Without Thesis)

After the examination, the committee shall recommend one of the following results:

- (a) That the independent research work is acceptable and the oral defense is acceptable

In this case the Chair of the Department and the student's supervisor shall sign the department's Letter of Recommendation.

- (b) That the examination be "adjourned"

This result should not be confused with failure (see c) Failure below). Examples of reasons to "adjourn" the examination include but are not limited to: the independent work is acceptable but the student has failed the oral defense; the committee splits "one for one against" in the case where the committee consists of two members. In the case of an "adjourned" examination the candidate shall not be passed and no member shall sign the department's Letter of Recommendation.

When an examination is "adjourned," each member of the examining committee shall make a written report to the Dean of Graduate Studies. After reviewing these reports the Dean shall set a date for reconvening the examination. The Dean shall also determine whether or not the composition of the original committee is appropriate for the reconvened examination. The date for reconvening shall be no later than six months from the date of the first examination.

- (c) Failure

If two members of the examining committee are opposed to passing the student, the student will not be recommended for the degree. In this case, the committee shall make a written report to the Dean outlining the reasons for this decision. A student who fails the oral examination has the right to appeal and should consult with the Dean of Graduate Studies regarding the appropriate procedure.

## 5.10 Degree Completion and Graduation

**5.10.1** The University Senate grants degrees in November (Fall) and May/June (Spring) each year. Each candidate for a degree must complete a formal application for graduation. The deadlines to submit completed applications are July 1 for Fall graduation and December 1 for Spring graduation. The Application for Graduation cards are available through the Graduate Admissions and Records Office. A graduation fee is assessed at the time of application, and is payable by the end of the month in which application is made.

**5.10.2** The deadlines for completing all requirements for the degree are the final business day in September for Fall graduation, and the final business day in April for Spring graduation. The exact dates for each convocation are set out in the "Deadlines for Convocation" memo.



**5.10.3.** Students can be considered for awarding of a degree only when all of the following requirements have been satisfied:

- For Doctoral and Master's with thesis candidates, submission of two final copies of the thesis or dissertation. Regulations governing the proper submission are set out in the "Instructions for the Preparation of Master's Theses and Doctoral Dissertations". Only the latest version of these instructions is valid. Students should obtain a copy from the Graduate Admissions and Records Office.
- Submission of the Letter of Recommendation for degree from the Department/School to the Graduate Admissions and Records Office. This letter states that all academic requirements have been completed.
- Payment of all outstanding fees. Those who have outstanding accounts will not receive a diploma or be issued any transcripts. Students should especially be aware of the minimum program fee for graduate degrees (see FEES FOR GRADUATE PROGRAMS in the FEES section of the calendar). All students should check their fee status at the Graduate Admissions and Records Office.

## **6.0 COOPERATIVE EDUCATION OPTION**

Some departments and schools at the University of Victoria participate in graduate Cooperative Education which integrates periods of full time employment with the academic program. Approval to participate in graduate co-op is at the discretion of the student's department/school, in consultation with the Faculty of Graduate Studies and the Director of Co-operative Education Program. Where approval is granted, procedures must adhere to the regulations set out under the General Regulations on page 38 of the Calendar. For information, please contact the Cooperative Education coordinator or the graduate adviser in the department concerned.

In departments where a formal graduate Cooperative Education program exists, work opportunities are negotiated through the appropriate Cooperative Education coordinator. Where no formal co-op program exists, graduate co-op placements are negotiated on an individual basis and may be initiated by interested employers, departmental representatives, or graduate students. In this case, students are directed to consult with the Office of the Director, Cooperative Education Program. The work experience must be related to the student's area of study.

Special regulations apply to the M.B.A. program (see entry for Business, page 304).

## **7.0 GRADUATE PROGRAMS BY SPECIAL ARRANGEMENT**

Exceptionally able students who wish to undertake a Master's or Doctoral degree between or outside existing programs at the University of Victoria may propose a program by Special Arrangement. Such programs may be either Interdisciplinary or within a single academic discipline (Departmental). Applications for programs by special arrangements should be submitted at least four months prior to the proposed entry point.

### **7.1 Interdisciplinary Graduate Programs by Special Arrangement**

#### **7.1.1 General**

Interdisciplinary programs can only be offered by Special Arrangement in a combination of departments that have established graduate degree programs. It is the applicant's responsibility to arrange the details of the program. The Faculty and departments are under no obligation to arrange or approve interdisciplinary programs.

#### **7.1.2 Proposal Approval**

Before an offer of admission can be made, applicants must have a proposal approved by the Dean of Graduate Studies. This proposal is jointly developed by the applicant and the projected supervisor and consists of a completed degree program form (including signatures of proposed supervisory committee) and a rationale for the program. The program must be genuinely interdisciplinary and the rationale must indicate the reasons why it is necessary to create an interdisciplinary degree rather than have the student apply to an existing program. It is expected that participating departments in an interdisciplinary degree will be equal partners in the program.

### **7.1.3 Academic Supervisor**

One member of the Supervisory Committee must be designated as the Academic Supervisor. Even though each department is considered an equal partner in the program, the Academic Supervisor's department will be considered the student's home department for administrative purposes. (see also 5.7.1 and 5.7.2)

### **7.1.4 Degree Program and Supervisory Committee**

The degree program may be negotiated by the members of the Supervisory Committee, but it must conform to all regulations of the Faculty of Graduate Studies. The Supervisory Committee must conform to regulation 5.7.2 c) and 5.7.2 e). Any changes to a degree program or Supervisory Committee must be approved by the Dean of Graduate Studies.

### **7.1.5 Admission**

Applicants for interdisciplinary degree programs must follow the admission procedures and meet the entrance criteria set out in regulations 1.0, 1.3 and 1.5.

Potential applicants are strongly encouraged to develop the degree program and assemble the Supervisory Committee before making formal application.

### **7.1.6 Program and Course Designation**

The student's official record will indicate the program as Interdisciplinary (INTD) and any project, comprehensive examinations, thesis, or dissertation will carry the prefix INTD.

## **7.2 Departmental Graduate Programs by Special Arrangement**

### **7.2.1 General**

Under appropriate conditions, it may be possible for departments to offer Masters and Doctoral degrees even though they do not have an established program. Such an offering is called a degree by Special Arrangement. Since these degree programs are created on an individual basis, the Faculty of Graduate Studies requires that applicants and departments satisfy a stringent approval process.

In order to be considered for approval to offer a Master's degree by Special Arrangement, the department must have an active major or honours undergraduate program and have graduated students from that program in each of the last three years.

In order to be considered for approval to offer a Doctoral degree by Special Arrangement, the department must have a regular Master's program and have graduated students from that program during the last three years.

It is the applicant's responsibility to arrange the details of the program. The Faculty and departments are under no obligation to arrange or approve Special Arrangement programs.

The Dean of Graduate Studies sets a quota for the number of Special Arrangement degrees permitted in any department.

### **7.2.2 Proposal Approval**

Before an offer of admission can be made, applicants must have a proposal approved by the Dean of Graduate Studies. This proposal is jointly developed by the applicant and the projected supervisor and consists of a completed degree program form (including signatures of proposed supervisory committee) and a rationale for the program.

### **7.2.3 Academic Supervisor**

A member of the supervisory committee from the sponsoring department must be designated as the Academic Supervisor. (see also 5.7.1 and 5.7.2)

### **7.2.4 Degree Program and Supervisory Committee**

The degree program may be negotiated by the members of the Supervisory Committee, but it must conform to all regulations of the Faculty of Graduate Studies.

The Supervisory Committee must conform to regulations 5.7.2 c) and 5.7.2 e). The Supervisory Committee for a Master's degree by Special Arrangement must include at least one member from a department with an active, regular Master's program, and who has supervised successful candidates for graduate degrees. The Supervisory Committee for a Doctoral degree by Special Arrangement must include at least one member from a department with an active, regular Ph.D. program, and both outside members must have successful Ph.D. supervisory experience.



Any changes to a degree program or Supervisory Committee must be approved by the Dean of Graduate Studies.

### 7.2.5 Admission

Applicants for degrees by Special Arrangement must follow the admission procedures and meet the entrance criteria set out in regulations 1.0, 1.3 and 1.5.

Potential applicants are strongly encouraged to develop the degree program and assemble the Supervisory Committee before making formal application.

### 7.2.6 Program and Course Designation

The student's official record will indicate the program as Special Arrangement. The degree program can consist of appropriate courses from within the department as well as regular courses from other departments. Departments with no regular graduate courses are authorized to create the following courses for Special Arrangement degree students only:

|                  |                           |
|------------------|---------------------------|
| DEPT 580 (1.5-3) | Directed Studies*         |
| +DEPT 597(0)     | Comprehensive Examination |
| +DEPT 598(3)     | Report/Project            |
| +DEPT 599(6-15)  | Thesis                    |
| DEPT 680(1.5-3)  | Directed Studies*         |
| +DEPT 699(30-45) | Dissertation              |

\*may be taken more than once for credit provided course content differs +grading is INP, COM, N, F

### 8.0 APPEALS

**8.1** Appeals related to the admission of new students are heard by the Admissions and Awards Committee of the Faculty of Graduate Studies and are not subject to further appeal.

**8.2** Appeals by students enrolled in the Faculty of Graduate Studies relating to their academic studies are dealt with according to the *Appeals Procedures: Faculty of Graduate Studies*. Copies of this document are available from the Office of the Dean of Graduate Studies.

**8.3** Appeals related to fee assessments are heard by the Graduate Fee Reduction and Appeals Committee. This committee is comprised of representatives from Graduate Admissions and Records, the Graduate Student's Society, and Accounting Services. Appeals should be directed

to the "Graduate Fee Reduction and Appeals Committee, c/o Accounting Services." Supporting documentation should be included with the letter of appeal.

**8.4** The appeal procedure of the Faculty of Graduate Studies does not cover matters such as harassment or employment grievances. Such matters must be dealt with through other university policies and agreements. The appeal procedures of the Faculty are relevant in such cases only as a means of addressing any direct academic consequences of above.

### 9.0 RESEARCH SERVICES

All matters concerning the administration of research grants and contracts are handled by the office of Research Administration, to which inquiries concerning research policies and procedures should be directed. Students whose research falls within the University definition of research involving human subjects must receive prior approval from the appropriate screening committee for research involving human subjects. Research Administration should be contacted for further details concerning research oriented services offered to graduate students.

### 10.0 TRANSCRIPT REQUESTS

Official transcripts of record are available through the Records Services; costs are outlined in the fees section of the calendar. Those students wishing verification of completion of degree requirements prior to Senate ratification of the degree, should request a "supporting letter" in addition to the official transcript.

### 11.0 WORK PERMITS

Department chairs wishing to hire foreign students for teaching or research duties may apply on their behalf to the Dean of Graduate Studies for a work permit to cover a specific period of academic study at the University. Such students must be registered in a degree program in the Faculty of Graduate Studies.

### 12.0 CONFLICT OF INTEREST

The University of Victoria's Conflict of Interest policies apply to the Faculty of Graduate Studies. Copies of these policies are available in departmental offices.

## ANTHROPOLOGY

The Department of Anthropology offers a course of study leading to the degree of Master of Arts. This program usually requires two years to complete, but in exceptional cases, the required time may be shorter.

**Admission** — In addition to transcripts, letters of recommendation, and application forms required by the Faculty of Graduate Studies, the department requires applicants to submit a recent sample of their work (term paper or Honours thesis), and a brief statement outlining the intended program and field of study. Ordinarily a B+ average (6.00 G.P.A.) for the last two years of university work is a minimum requirement for admission to the program.

The Master of Arts degree in anthropology is a general degree requiring a candidate to have a broad knowledge of the subfields of the discipline. In addition to requirements and procedures specified by the Faculty of Graduate Studies, the following general comments apply.

#### 1. Program of Studies

The Department offers two programs of equal status, leading to the M.A. degree: (a) by course work and thesis; and (b) by course work only.

All entering graduate students follow a common program. Approval to select the thesis option is given after completion of two terms of work and is based on satisfactory progress in developing a thesis proposal. Permission to enter the thesis option is granted only if that thesis proposal, approved by the student's supervisory committee, is on file with the department's Graduate Adviser before the next registration subsequent to the initial two terms. It is assumed that students who do not file a proposal will continue in the nonthesis option.

#### A. Thesis Option:

This program involves at least 12 units of course work and a 6 unit thesis.

**CORE COURSES:** A student's program will include the following core courses:

- 500 Seminar in Anthropological Theory, 3 units
- 501 Seminar in Social and Cultural Anthropology, 1½ units
- 540 Seminar in Archaeology and Culture History, 1½ units
- 550 Seminar in Physical Anthropology, 1½ units
- 560 (LING 560), Linguistic Anthropology, 1½ units.

Core courses contribute 9 units toward the 18 unit minimum requirement for the thesis option.

**THESIS:** The thesis, carrying 6 units of credit, must meet the stylistic requirements of the department and must be submitted according to a time schedule set by the department. Normally a thesis will entail specialized research on a topical area chosen in consultation with the student's supervisory committee.

**OPTIONAL COURSES:** Students may choose the remainder of their program from the departmental listings of graduate courses, and may take a maximum of 6 units of upper level undergraduate courses.

#### B. Nonthesis Option

This program involves a minimum of 18 units of course work if the student is sufficiently well prepared to complete the program in one calendar year. Most students will require 2 years to complete the program and will be required to take a minimum of 21 units of course work.

**CORE COURSES:** A student's program will include the following core courses:

- 500 Seminar in Anthropological Theory, 3 units
- 501 Seminar in Social and Cultural Anthropology, 1½ units
- 540 Seminar in Archaeology and Culture History, 1½ units
- 550 Seminar in Physical Anthropology, 1½ units
- 560 (LING 560), Linguistic Anthropology, 1½ units



**ADDITIONAL COURSES:** In addition to the core courses, a student's program should include 3 units selected from a, b, c, or d below:

- (a) 510 (1½) Selected Topics in Social and Cultural Anthropology
- (b) 530 (1½) Ethnology of a Selected Area
- (c) 542 (1½) Archaeology of a Selected Area
- (d) 552 (1½) Selected Topics in Physical Anthropology

Plus 6 units of electives. (3 additional units of electives are required if the student completes the program in 2 years.) Students may take a maximum of 6 units of upper level undergraduate courses.

**ORAL EXAMINATION:** At the end of the program there will be a final oral examination based on three papers prepared as part of the requirements for graduate courses. The three papers will be selected to reflect a variety of interests and approaches.

## 2. Length of Program

Most students require two years to complete the master's degree program, although it may be possible for a student with a satisfactory background to complete the degree in one year. In addition to the graduate courses, students are required to have passed undergraduate courses equivalent to those comprising the Anthropology Honours Program (excluding 499) as outlined in the Calendar. Students without this equivalent must take the appropriate courses to satisfy the Honours requirements before completing their degree.

The programs outlined above indicate minimal requirements. In tailoring the program to individual needs, a student's supervisory committee may specify courses to be taken. To correct deficiencies in the student's undergraduate program, the committee may also increase the number of units required. For example, students who enter without at least an undergraduate major may be advised to spend the first year in upper level undergraduate courses before beginning the core program. Similarly, students who have not had courses in quantitative methods and in anthropological linguistics will be advised to elect Anthropology 316 and 317 and an appropriate course, or courses, in Linguistics.

Prospective students are urged to consult the department for assistance in planning a program of study and for more specific information about course offerings.

## Faculty and Current Areas of Interest

|   |   |
|---|---|
| William H. Alkire, Ph.D.<br>(Illinois)  | Ethnology: cultural ecology, Micronesia and Southeast Asia  |
| N. Ross Crumrine, Ph.D.<br>(Arizona)    | Ethnology; symbolic anthropology, mythology, peasants, culture change, Latin America, Southwest North America, Philippines            |
| Leland H. Donald, Ph.D.<br>(Oregon)     | Ethnology: social organization, quantitative methods, West Africa, Northwest Coast  |
| Margo L. Matwychuk, Ph.D.<br>(C.U.N.Y.) | Ethnology: anthropology of power, rural societies, development and underdevelopment, elites, theory, Latin America, Caribbean         |
| Donald H. Mitchell, Ph.D.<br>(Oregon)   | Archaeology: ethnohistory, cultural ecology, heritage resource management, Pacific Northwest  |
| David S. Moyer, Ph.D.<br>(Leiden)       | Ethnology: social organization, structural anthropology, secular symbolism, Arctic, Indonesia, the Netherlands                        |
| Nicolas Rolland, Ph.D.<br>(Cambridge)   | Archaeology: palaeolithic, ancient hominid societies, hunter-gatherers, method and theory, Western Eurasia, Mediterranean, Inner Asia |
| Eric A. Roth, Ph.D.<br>(Toronto)        | Physical Anthropology: demography, pastoralists, Africa   |

Peter H. Stephenson, Ph.D.  
(Toronto)

Margot Wilson-Moore, Ph.D.  
(Southern Methodist)

Ethnology: medical anthropology, ritual and symbolism, communication theory, applied anthropology, communal societies, Canada, Europe

Ethnology: applied anthropology, medical anthropology, feminist theory, South Asia

## GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

### ANTH 500 (3) SEMINAR IN ANTHROPOLOGICAL THEORY

### ANTH 501 (1½) SEMINAR IN SOCIAL AND CULTURAL ANTHROPOLOGY

#### \*ANTH 510 (1½) SELECTED TOPICS IN SOCIAL AND CULTURAL ANTHROPOLOGY

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

- 510A Social Organization
- 510B Economic Anthropology
- 510C Political Anthropology
- 510D Anthropology of Religion
- 510E Symbolic Anthropology
- 510F Cultural Ecology
- 510G Cultural Change
- 510H Medical Anthropology

#### \*ANTH 530 (1½) ETHNOLOGY OF SELECTED AREAS

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

- 530A North America
- 530B Circum-Polar Region
- 530C Middle America
- 530D South America
- 530E Oceania
- 530F Northeast Asia
- 530G Southeast Asia
- 530H Sub-Saharan Africa
- 530J Pacific Northwest
- 530K South Asia

### ANTH 540 (1½) SEMINAR IN ARCHAEOLOGY AND CULTURE HISTORY

#### \*ANTH 542 (1½) ARCHAEOLOGY OF A SELECTED AREA

### ANTH 550 (1½) SEMINAR IN PHYSICAL ANTHROPOLOGY

#### \*ANTH 552 (1½) SELECTED TOPICS IN PHYSICAL ANTHROPOLOGY

Depending on the student's interests and the availability of an instructor, studies may be selected in one or more of the following:

- 552A Applied Topics in Osteological Methods
- 552B Soft Part Methods in Population Variation
- 552C Anthropometry and Disease
- 552D Primatology

### ANTH 560 (LING 560)(1½) LINGUISTIC ANTHROPOLOGY

#### \*ANTH 590 (1½-3) DIRECTED STUDIES

### ANTH 597 (0) ORAL EXAMINATIONS (Grading: INP, COM, N or F)

### ANTH 599 (6) THESIS (Grading: INP, COM, N or F)

\*Students must consult the Department before enrolling in this course.



## BIOCHEMISTRY AND MICROBIOLOGY

The Department of Biochemistry and Microbiology offers courses leading to the degrees of Master of Science and Doctor of Philosophy in Biochemistry or Microbiology.

The general regulations governing the granting of advanced degrees as stated in the Calendar on pages 288-297 are applicable.

1. Examinations, oral or written, are mandatory as aids in the planning of individual academic programs.
2. Applicants should arrange to take the G.R.E. (Graduate Record Examination) and submit the results to the Faculty of Graduate Studies with their applications. Students whose native language is not English should submit, in addition to the G.R.E., results of the T.O.E.F.L. (Test of English as a Foreign Language) with their application.
3. All graduate students are required to participate in Biochemistry 580 (seminar) or Microbiology 580 (seminar) throughout the period of registration.
4. All graduate students are required to undertake teaching assistantships or equivalent duties within the Department.
5. Candidates for graduate degrees are required to complete Biochemistry or Microbiology 599 (M.Sc. Thesis) or 699 (Ph.D. Dissertation). In addition to the seminar and thesis or dissertation requirements, candidates for the M.Sc. degree are required to complete a minimum of 6 units of graduate work,  $4\frac{1}{2}$  units of which must be 500 level courses (other than 570 — Directed Studies) approved by the department. Candidates proceeding to a Ph.D. degree from a B.Sc. require a minimum of 12 units of graduate course work,  $7\frac{1}{2}$  units of which must be 500 level courses, other than 570, approved by the department. Candidates proceeding to a Ph.D. degree from an M.Sc. require a minimum of 6 additional units of graduate course work, 3 units of which must be 500 level courses, other than 570. In addition, all Ph.D. candidates must successfully complete BIOC or MICR 680.

### Applications

Requests for information regarding graduate studies in Biochemistry and Microbiology should be sent to the Chair. Application forms are available from the office of the Faculty of Graduate Studies.

Applicants may be considered for admission at any time. Normally applicants with less than a B+ (6.00 G.P.A.) or equivalent average will not be recommended for admission.

### Faculty and Current Areas of Interest

Juan Ausio, Ph.D.  
(Barcelona)

Biophysical and biochemical studies of DNA-protein interactions involved in chromatin assembly and transcription; biochemical and biophysical characterization of DNA-binding proteins during spermatogenesis and analysis of the regulation and structure of their genes

J. Thomas Buckley, Ph.D.  
(McGill)

Protein secretion; mechanism of action of a microbial channel-forming toxin, properties of lipolytic enzymes

Edward E. Ishiguro, Ph.D.  
(Illinois)

Genetic and biochemical studies on the regulation of cell wall synthesis and morphogenesis in *Escherichia coli*. Basis for antibiotic induced bacteriolysis and penicillin tolerance. Molecular characterization of the starvation stress response in *Escherichia coli*

William W. Kay, Ph.D.  
(British Columbia)

Bacterial cell surfaces: molecular biology of transport and pathogenesis in *Aeromonas* and *Salmonella*

Alastair T. Matheson, Ph.D.  
(Toronto)

Structure of archaeobacterial ribosomes; structure and evolution of ribosomal proteins; structure of ribosomal protein genes; RNA-protein interactions

Santosh Misra, Ph.D.  
(McMaster)

Plant molecular biology: studies on developmentally regulated and stress-induced gene activity in conifers. Genetic engineering and biotechnology

Francis E. Nano, Ph.D.  
(Illinois)

Molecular analysis of virulence factors of intracellular bacterial pathogens, especially *Chlamydia trachomatis*, *Francisella tularensis* and *Mycobacterium tuberculosis*

Robert W. Olafson, Ph.D.  
(Alberta)

Structure function relationships in membrane glycoproteins; structural studies on polypeptides and oligosaccharides relevant to the pathogenesis of parasitic diseases, polypeptide vaccines

Terry W. Pearson, Ph.D.  
(British Columbia)

Immunochemistry and biochemistry of parasitic diseases; immunology of membrane antigens; immunodiagnosis of disease

Paul J. Romaniuk, Ph.D.  
(McMaster)

Molecular basis of nucleic acid-protein interactions involved in the regulation of gene expression; structure-function relationships in oncogenes

Trevor J. Trust, Ph.D.  
(Melbourne)

Molecular basis for bacterial virulence and antigenicity, especially *Aeromonas*, *Campylobacter*, and *Helicobacter*. Structure-function relationships in bacterial surfaces

Christopher Upton, Ph.D.  
(London)

Virology: molecular studies on poxvirus virulence factors; analysis of cytokine antagonists secreted from poxvirus infected cells; characterization of a zinc finger protein associated with poxvirus virulence; cloning and sequencing of variable regions of the ectromelia virus genome

## GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses that will be offered this year.

### BIOCHEMISTRY

#### BIOC 501 (1½) NUCLEIC ACIDS

An advanced study of the structures and functions of RNA and DNA. Topics will include protein synthesis in prokaryotes and eukaryotes and the supramolecular organization of chromatin, ribosomes and viruses. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 501 and 401)

#### BIOC 503 (1½) LIPIDS AND MEMBRANES

The molecular properties of the various classes of lipids and glycolipids, as well as their biosynthesis and regulation, will be considered. The supramolecular structure, function and assembly of biological membranes will constitute the major content of the course. The course will consist of formal lectures in addition to required reading and brief seminars by the students. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 503 and 403)



**BIOC 504 (1½) PROTEINS**

Detailed examination of protein structure emphasizing techniques for isolation, characterization, chemical modification and synthesis of proteins and peptides. The course will consist of formal lectures in addition to required readings and brief seminars by the students. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 504 and 404)

**BIOC 520 (1½) STRUCTURE OF NUCLEIC ACIDS AND GENE EXPRESSION**

An in depth consideration of recent advances in the biology and physico-chemical properties of nucleic acids. The regulation of gene expression in prokaryotes and eukaryotes will be discussed.

**BIOC 521 (1½) BIOLOGICAL MEMBRANES**

An advanced study of the properties and functions of biological membranes. Areas of emphasis will include membrane syntheses and assembly, complex membrane systems involved in bioenergetics, molecular transport, signal transduction, and protein secretion.

**BIOC 522 (1½) PROTEIN STRUCTURE AND FUNCTION**

An in depth consideration of recent advances in protein structure-function relationships from both a chemical and physical perspective. The course will consist of formal lectures in addition to required readings and written presentations by students on selected topics. (*Prerequisite:* 404, 504 or equivalent courses)

**BIOC 523 (FORB 523) (1½) MOLECULAR BIOTECHNOLOGY**

This course is designed to provide an introduction to recent advances in molecular biotechnology. The following topics will be addressed: recombinant DNA technology, genetic engineering; vectors for genetic transformation, direct gene transfer via liposomes, electroporations, microinjection of DNA, specific examples of transgenics, protein engineering; targeting, import and export of chimeric proteins in cells and organelles, monoclonal antibodies, antisense RNA, industrial enzyme production. This course will consist of formal lectures with written and oral presentations by the students on selected topics. Seminars will be presented by visiting speakers, and several faculty members will contribute to the course in their area of expertise. (*Prerequisite:* 300) (Credit cannot be obtained for both BIOC/MICR 405 and FORB/BIOC 523)

**BIOC 524 (FORB 524) (1½) PLANT MOLECULAR BIOLOGY**

The following topics will be addressed: organization and expression of plant and chloroplast genomes. Regulation of plant gene expression by light and physiochemical stress, molecular basis of plant hormone action, tissue and organ specific gene expression, molecular genetic approaches to key processes in plants such as nitrogen fixation, photosynthesis, storage protein synthesis, plant viruses and transposable elements, vectors for genetic engineering of plant tissue. (*Prerequisite:* BIOL 300, 331 A/B, BIOC 300)

**BIOC 525 (1½) TOPICS IN BIOCHEMISTRY**

Selected topics in Biochemistry as presented by members of the faculty.

**BIOC 570 (1-3) DIRECTED STUDIES IN BIOCHEMISTRY**

A wide range of biochemical topics will be available for assignments. Topics will be restricted to an analysis of recent advances. The student's graduate adviser will not normally participate in directed studies taken for more than one unit of credit. May be taken more than once for credit in different topics.

**BIOC 580 (0) SEMINAR**

Attendance and participation are required. Formal presentation of a major research topic in Biochemistry other than the student's own research will be required. (Grading: INP, COM, N or F)

**BIOC 599 (credit to be determined) M.SC. THESIS: BIOCHEMISTRY**

(Grading: INP, COM, N or F)

**BIOC 680 (0) ADVANCED RESEARCH SEMINAR**

Attendance and participation are required. Formal presentation of thesis research in Biochemistry and critical discussion of other research seminars. (Grading: INP, COM, N or F)

**BIOC 699 (credit to be determined) PH.D. DISSERTATION: BIOCHEMISTRY**

(Grading: INP, COM, N or F)

**MICROBIOLOGY****MICR 501 (1½) MOLECULAR PHYSIOLOGY**

An advanced consideration of the molecular aspects of microbial cell structure and growth. Emphasis will be given to the coordination of microbial catabolism, bioenergetics and biosynthesis and cell assembly. The course will consist of formal lectures with additional literature reading and brief seminars by students. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 501 and 401)

**MICR 502 (1½) VIROLOGY**

An advanced consideration of the molecular aspects of viruses. Emphasis will be placed on the animal viruses with respect to: infection process; replication cycle; interactions with the host cell; mechanisms of pathogenicity; vaccines. The course consists of lectures with additional literature reading and brief seminars by students. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 502 and 402)

**MICR 503 (1½) IMMUNOLOGY**

The generation of antibody diversity; immune effector mechanisms and their regulation; immunological principles as applied to research and medicine. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 503 and 403)

**MICR 504 (1½) MOLECULAR PATHOGENICITY**

A detailed consideration of recent advances in microbial pathogenesis. The course consists of lectures with oral and written presentations by the students on selected topics. Attendance at seminars given by visiting speakers will be required. Students will be required to write an advanced research paper as part of the course evaluation. (Credit will not be given for both 504 and 404)

**MICR 520 (1½) MICROBIAL GENETICS**

A consideration of recent advances in selected areas of microbial genetics.

**MICR 521 (1½) HOST-PARASITE INTERACTIONS**

This course will focus on the molecular and cellular aspects of host-parasite interaction. Bacterial, viral and eukaryotic parasites will be considered. Both parasite and host factors involved in virulence and pathogenesis will be studied with emphasis on host immune responses and the molecular strategies employed by the parasites to evade them.

**MICR 525 (1½) TOPICS IN MICROBIOLOGY**

Selected topics in Microbiology as presented by members of the faculty.

**MICR 570 (1-3) DIRECTED STUDIES IN MICROBIOLOGY**

A wide range of microbiological topics will be available for assignment. Topics will be restricted to an analysis of recent advances. The student's graduate adviser will not normally participate in directed studies taken for more than one unit of credit. May be taken more than once for credit in different topics.

**MICR 580 (0) SEMINAR**

Attendance and participation are required. Formal presentation of a major research topic in Microbiology other than the student's own research will be required. (Grading: INP, COM, N or F)

**MICR 599 (credit to be determined) M.SC. THESIS: MICROBIOLOGY**

(Grading: INP, COM, N or F)

**MICR 680 (0) ADVANCED RESEARCH SEMINAR**

Attendance and participation are required. Formal presentation of thesis research in Microbiology and critical discussion of other research seminars. (Grading: INP, COM, N or F)

**MICR 699 (credit to be determined) PH.D. DISSERTATION: MICROBIOLOGY**

(Grading: INP, COM, N or F)



## BIOLOGY

The Department of Biology offers programs leading to the degrees of Master of Science and Doctor of Philosophy in the general areas of Ecological and Evolutionary Biology, Physiology and Cellular and Molecular Biology.

### Facilities

Facilities available include herbarium, greenhouses, constant environment rooms, equipment for radioisotope analysis, an electron microscope laboratory equipped with scanning, transmission and analytical electron microscopes, and closed circulation seawater systems. Ships are available for oceanographic work, including the University's 16.4 metre marine science service vessel JOHN STRICKLAND. Marine, terrestrial and limnological environments permit field work throughout the year.

### Applications

Initial inquiries regarding graduate studies in Biology should be addressed to the Graduate Adviser, Department of Biology. Application forms may be obtained from the office of the Dean of Graduate Studies.

Normally, applicants to the Department of Biology who completed their undergraduate degree at a non-Canadian University should take the G.R.E. (Graduate Record Examination) (General and Subject exams) and submit the results to the Graduate Admission and Records Office. Applicants whose native language is not English should, in addition to the G.R.E., write the TOEFL (Test of English as a Foreign Language) and submit the scores to the Faculty of Graduate Studies (see page 288 for Faculty requirements) together with their application forms and G.R.E. results. Even with passing TOEFL scores, students may be required to take English language courses as well as their other course work.

All M.Sc. and Ph.D. candidates admitted to the Department of Biology are expected to have or to make up a background knowledge of basic biology at least equivalent to that of a B.Sc. student graduating from this department.

Emphasis in graduate programs is on independent research. An M.Sc. student can expect to take a minimum of 2 years and a Ph.D. student 3 years if entering with a M.Sc. or 4 years if entering with a B.Sc. Students entering with a B.Sc. and intending to take a Ph.D. program will initially be registered in a M.Sc. program. They may be transferred to a Ph.D. program at the end of their first year, on the recommendation of their Supervisory Committee and the Department of Biology and approval by the Dean of Graduate Studies. The M.Sc. program normally requires a minimum of 16 units, with not less than 6 units of graduate courses and BIOL 560. The thesis must be at least 9 units. The Ph.D. program usually requires a minimum of 31 units beyond the M.Sc. or 46 units beyond the B.Sc. At least 6 units of graduate course work and BIOL 560 are normally required. The dissertation must be a minimum of 18 units. Students who completed their M.Sc. in the department of Biology who subsequently enter a Ph.D. program are required to complete only 3 units of graduate course work and BIOL 560. Normally, work as a research assistant or teaching assistant is an integral part of graduate programs.

Applications from students with a first class academic record will be considered for recommendation at any time. Applicants with less than a B+ average or its equivalent in their last two years of work will not normally be recommended for admission by the Department of Biology.

### Faculty and Areas of Research

|   |  |
|---|--|
| Geraldine A. Allen, Ph.D.<br>(Oregon State) | Systematics and evolution of flowering plants; plant reproductive biology  |
| Joseph A. Antos, Ph.D.<br>(Oregon State)    | Plant ecology, clonal growth of forest herbs, dynamics of old-growth forests; plant reproductive biology             |
| Michael J. Ashwood-Smith,<br>Ph.D. (London) | Ultra violet photobiology and mechanisms of mutation induction; low temperature biology                              |
| Alan P. Austin, Ph.D.<br>(Wales)            | Marine and freshwater phycology and ecology; environmental impact assessment; bioremediation; aquaculture; bioethics |

Robert D. Burke, Ph.D.  
(Alberta)

Francis Y.M. Choy, Ph.D.  
(North Dakota)

Don Eastman, Ph.D.  
(British Columbia)

Derek V. Ellis, Ph.D.  
(McGill)

Barry W. Glickman, Ph.D.  
(Leiden)

Patrick T. Gregory, Ph.D.  
(Manitoba)

Barbara J. Hawkins, Ph.D.  
(Canterbury)

Craig W. Hawryshyn, Ph.D.  
(Waterloo)

William E. Hintz, Ph.D.  
(Toronto)

Louis A. Hobson, Ph.D.  
(Washington)

Benjamin F. Koop, Ph.D.  
(Wayne State)

David B. Levin, Ph.D.  
(McGill)

Nigel J. Livingston, Ph.D.  
(British Columbia)

George O. Mackie, D.Phil.  
(Oxford)

John N. Owens, Ph.D.  
(Oregon State)

Dorothy H. Paul, Ph.D.  
(Stanford)

Robert G. B. Reid, Ph.D.  
(Glasgow)

Thomas E. Reimchen, D.Phil.  
(Liverpool)

Richard A. Ring, Ph.D.  
(Glasgow)

Nancy M. Sherwood, Ph.D.  
(Berkeley)

Developmental biology, Morphogenesis; cellular interactions with extracellular matrix in chick heart development and gastrulation in sea urchins

Molecular biology, genetic control of enzyme activities in human Gaucher disease

Animal ecology, birds and mammals, population biology of large mammals

Marine ecology; sediment benthos; environmental impact assessment and recovery

Impact of environmental variations on mutations in the human gene

Ecology of reptiles and amphibians

Conifer seedling physiology; mineral nutrition, cold tolerance

Vertebrate neurobiology and behaviour especially of fishes; sensory biology of migration in Pacific Salmonids; visual processing; evolution of colour vision in fishes

Molecular genetics and characterization of pathogenicity determinants of phytopathogenic fungi

Biological oceanography; phytoplankton ecology and physiology

Molecular biology, envolutionary relationships among mammals, mammalian systematics

Baculovirus and biological control of insect pests

Plant biophysics, environmental physiology, conifer water relations

Neurobiology of invertebrates especially coelenterates and tunicates

Reproductive biology of forest trees

Comparative and evolutionary neurobiology especially of crustaceans

Molluscan feeding, digestion, symbiosis; evolutionary theory

Evolutionary and ecological factors responsible for intraspecific variability of genetic and phenotypic traits in animal populations

Physiology and ecology of insects; insect biodiversity in old-growth forests; cold tolerance of Arctic insects

Neurobiology of fish reproduction and growth



Verena J. Tunnicliffe, Ph.D.  
(Yale)

Patrick von Aderkas, Ph.D.  
(Manchester)

Marine benthic ecology and community structure; evolution

Conifer tissue culture and embryogenesis

## GRADUATE COURSES

### BIOLOGY

Students should consult the Department concerning which courses will be offered in any year. All students are to register for 560 (seminar). Ph.D. candidates are required to present a departmental seminar in the final year of their program.

Admission to any graduate course requires permission of the instructor.

The following courses are offered regularly and are the principal graduate course offerings in the Department of Biology.

#### BIOL 500 (1½) SELECTED TOPICS IN THE HISTORY AND PHILOSOPHY OF BIOLOGY

An epistemological introduction to the history of biological ideas, and creative scientific methodology. Brief introductory readings preface weekly evening tutorials in the first term. Evaluation is based upon student oral and written presentations on a wide range of historical and philosophical topics pertaining to biology. F

#### BIOL 509A (1½) NEUROBIOLOGY SEMINAR

One hour/week seminar on topics in current research in neurobiology. Y

#### BIOL 511 (1½) MARINE SCIENCE SEMINAR

Selected topics in marine biology will be dealt with in depth. (May be repeated more than once) (Offered in the spring term of even numbered years) S

#### BIOL 518 (1½) ELECTRON MICROSCOPY

An introduction to the principles and basic techniques of electron microscopy emphasizing common preparative methods for transmission and scanning electron microscopy. A final report illustrated by the student's electron photomicrographs is required. (Prerequisite: 344 or 417 or equivalent, and permission of the Electron Microscopy Supervisor. Enrollment is restricted to 3 students per term.) FS

#### BIOL 520 (1½) TECHNIQUES IN MOLECULAR BIOLOGY

This course is intended to provide participants with an intensive overview of molecular biological techniques with both theoretical background and "hands-on" experience. Techniques such as restriction endonuclease analysis; agarose, polyacrylamide, and pulsed field gel electrophoresis; molecular cloning; Southern blot analysis; mRNA extraction and Northern blot analysis; expression vectors; and polymerase chain reaction will be performed. S

#### BIOL 523 (1½) PHYSIOLOGICAL ECOLOGY OF AQUATIC PLANTS

A series of lectures examining the physiological and biochemical processes in aquatic plants that determine, in part, their temporal and spatial distributions in nature. Students will read the relevant primary literature and will present the material in a seminar format. (Offered in the Spring term of odd numbered years) Meet with instructor for prerequisite. S(2-2)

#### BIOL 525 (1½) ECOLOGICAL AND EVOLUTIONARY PHYSIOLOGY

A series of lectures and seminars examining several subjects of current interest in the ecological and evolutionary physiology of animals and plants. Interdisciplinary approaches to questions of organisms' adaptations and interactions with their environment are to be emphasized. Students will prepare a critical analysis of a subject for presentation orally and in a written report. F(3-0)

#### BIOL 535 (Formerly 555) (1½) ADVANCED EVOLUTIONARY BIOLOGY

A lecture and discussion course dealing with the processes of evolution. Topics may vary from year to year, and will include one or more of the following: microevolutionary and macroevolutionary processes, speciation mechanisms, phylogeny reconstruction, molecular evolution, the genetic basis of morphological change. Areas of current controversy will be explored. (Prerequisites: 300 and 355 or equivalent) F(3-0)

#### BIOL 544 (1½) MOLECULAR EVOLUTION

An advanced study of the evolution of genomes and macromolecules. Topics include: genome projects, mechanisms, patterns and consequences of molecular change, gene and species evolution population genetics, polymorphism and disease prebiotic evolution and the evolution of life. Students will be expected to do considerable outside reading from books and journals. Class will involve lectures, discussion and individual presentations.

#### BIOL 549 (1-6) INDIVIDUAL STUDY

(May be taken more than once in any of the following areas under the appropriate faculty member)

- 549A Evolution
- 549B Ecology
- 549C Physiology
- 549D Cell Biology
- 549E Molecular Biology

#### BIOL 550 (1-6) DIRECTED STUDIES

(May be taken more than once in any of the following areas under the appropriate faculty member.)

- 550A Evolution
- 550B Ecology
- 550C Physiology
- 550D Cell Biology
- 550E Molecular Biology

#### BIOL 560 (1) GRADUATE SEMINAR

Required of all graduate students every year of their degree program except by Departmental permission. Shall be treated, in its grading, as the thesis or the dissertation and shall be given one unit of credit upon completion. (Grading: INP, COM, N or F)

#### BIOL 563 (STAT 563) (1½) TOPICS IN APPLIED STATISTICS

Survival analysis, generalized linear models, multivariate normal models, resampling methods, nonparametric and robust methods, meta-analysis, miscellaneous techniques. Joint with STAT 563.

#### BIOL 599 (credit to be determined) THESIS

(Grading: INP, COM, N or F)

#### BIOL 699 (credit to be determined) PH.D. DISSERTATION

(Grading: INP, COM, N or F)

Courses listed below are offered irregularly as lectures or seminars in a specialized area. Students should consult with their supervisor or the Graduate Adviser on the availability of such courses. For some of these courses, students may be asked to complete the requirements for a senior undergraduate course as well as additional assignments.

#### BIOL 509B (1½) NEUROBIOLOGY LECTURE

See BIOL 409A

#### BIOL 509C (1½) NEUROBIOLOGY LABORATORY

See BIOL 409B

#### BIOL 510 (3) ADVANCED TOPICS IN ICHTHYOLOGY

#### BIOL 512 (1½) ADVANCED BENTHOS ECOLOGY

#### BIOL 513 (1-3) TOPICS IN DEVELOPMENTAL BIOLOGY

#### BIOL 514 (1½) ADVANCED ZOOPLANKTON ECOLOGY

#### BIOL 515 (1½) ECOLOGY SEMINAR

#### BIOL 516 (1½) NEUROETHOLOGY

See BIOL 414.

#### BIOL 519 (1½) ADVANCED ELECTRON MICROSCOPY

#### BIOL 521 (1½) ADVANCED TOPICS IN MARINE AND/OR FRESHWATER ALGAE

#### BIOL 526 (1½) TOPICS IN BIOLOGICAL ULTRASTRUCTURE

See BIOL 424

#### BIOL 527 (1-3) ADVANCED TOPICS IN CELL BIOLOGY

#### BIOL 530 (1½) PRINCIPLES OF TAXONOMY

See BIOL 430



**BIOL 532 (1½) TOPICS IN ENDOCRINOLOGY**

See BIOL 432

**BIOL 540 (1½) MOLECULAR EPIDEMIOLOGY**

Lectures will cover the principles of epidemiology from a molecular perspective. Students will make oral presentations on a chosen human gene to establish a modern view of human population genetics based upon molecular data. (Offered in second term of odd numbered years)

S(3-0)

**BIOL 541 (1½) THE MOLECULAR BASIS OF MUTATION**

Lectures and student reports on assigned topics will concentrate on the various pathways that create mutation including errors of replication, endogenous DNA damage and environmental assault. The nature of DNA damage and DNA repair will be considered. (Offered in second term of even numbered years.)

S(3-0)

**BIOL 555 (1½) ADVANCED EVOLUTIONARY BIOLOGY****FOREST BIOLOGY****FORB 500 (1½) FOREST BIOLOGY**

Required of all Forest Biology graduate students. An overview of the philosophy and goals of forest biology from the perspectives of: past, present and future needs; industry, government and university roles; and, basic and applied research and development.

(2-0)

**FORB 520 (1½) FOREST GENETICS AND TREE IMPROVEMENT**

Lecture and discussion of current literature and advanced topics in forest genetics and tree improvement. Emphasis on the application of basic genetic principles to forest tree breeding and tree improvement. Topics may include: population genetics, selection and breeding, seed production and seed orchards, progeny testing, vegetative propagation, species hybridization, molecular genetics, and gene conservation. (*Prerequisite*: BIOL 300)

**FORB 523 (BIOC 523) (1½) MOLECULAR BIOTECHNOLOGY**

This course is designed to provide an introduction to recent advances in molecular biotechnology. The following topics will be addressed: recombinant DNA technology, genetic engineering; vectors for genetic transformation, direct gene transfer via liposomes, electroporations, microinjection of DNA, specific examples of transgenics, protein engineering; targeting, import and export of chimeric proteins in cells and organelles, monoclonal antibodies, antisense RNA, industrial enzyme production. This course will consist of formal lectures with written and oral presentations by the students on selected topics. Seminars will be presented by visiting speakers, and several faculty members will contribute to the course in their area of expertise. (*Prerequisites*: BIOL 300, BIOL 331A/B, BIOC 300) (Credit cannot be obtained for both BIOC/MICR 405 and FORB/BIOC 523)

(3-0)

**FORB 524 (BIOC 524) (1½) PLANT MOLECULAR BIOLOGY**

The following topics will be addressed: organization and expression of plant and chloroplast genomes. Regulation of plant gene expression by light and physiochemical stress, molecular basis of plant hormone action, tissue and organ specific gene expression, molecular genetic approaches to key processes in plants such as nitrogen fixation, photosynthesis, storage protein synthesis, plant viruses and transposable elements, vectors for genetic engineering of plant tissue. (*Prerequisites*: BIOL 300, BIOC 300, BIOL 331 A/B)

(3-0)

**FORB 532 (1½) REPRODUCTIVE BIOLOGY OF FOREST TREES**

The physiology and development of reproductive structures will be covered from the stages of floral initiation to seed maturity. Floral induction, pollination and factors affecting seed, cone and flower development will be discussed. Laboratories will include floral induction, floral development, pollination biology, pollen physiology, embryology, and seed, cone and fruit development.

S(2-3)

**FORB 543 (1½) CONIFER BIOLOGY**

A comprehensive study of conifers emphasizing their origin and evolution and the taxonomy and distribution of native and exotic species. Seed biology, seedling development, bud and shoot development, vascular tissue development and structure and reproductive biology will be covered. Laboratories will involve field trips, developmental and physi-

ological studies. Current literature will be assigned and a term paper required.

**FORB 546 (1½) CLONAL PROPAGATION OF FOREST TREES**

Present and future techniques for clonal propagation of forest trees will be considered as well as the potential and limitations of clonal propagation for reforestation. Techniques for rooting of cuttings, grafting, bud and embryo culture and somatic embryogenesis will be taught. Development of techniques for embryoid culture from single cells and root and shoot development from callus will be discussed. Laboratories will emphasize clonal propagation techniques using conifer and selected hardwood species. (*Prerequisite*: 545 or permission of the instructor)

F(2-3)

**FORB 551 (1½) TREE PHYSIOLOGY**

Basic principles of mineral nutrition, water relations, photosynthesis, respiration, and growth regulators as they apply to forest trees; and environmental influence on forest metabolism, growth, development and reproduction.

F(2-3)

**FORB 552 (1½) SEEDLING PHYSIOLOGY AND REGENERATION**

This course will concern the production of seedlings for reforestation. Nursery practices influencing growth, dormancy induction and cold hardiness; and measures of seedling performance and quality will be discussed. The performance of natural regeneration, and environmental influences on regeneration will be considered.

F(2-3)

**FORB 553 (1½) ENVIRONMENTAL PHYSIOLOGY OF PLANTS**

Interactions between plants, soil and the atmosphere and how these interactions determine plant survival, growth and development. Topics will include heat and mass transfer, plant-water relations, photosynthesis and respiration, plant growth regulators and environmental control of morphogenesis. (*Prerequisite*: 331A)

(3-0)

**FORB 555 (1½) ADVANCED FOREST PATHOLOGY**

Lectures and laboratory sessions designed to familiarize graduate students with the most recent advancements in forest pathology. Topics may include: a review of past and present scientific literature, status of the world's most important forest diseases and techniques such as recent advancements in biotechnology that are being used to solve forest pathology problems. (*Prerequisite*: A course in Mycology or Plant Pathology)

F(2-3)

**FORB 556 (1½) TECHNIQUES IN FOREST PATHOLOGY**

A series of lectures and laboratory and field exercises to acquaint graduate students with specific techniques that are being used by both researchers and silviculturalists for solving disease problems. (*Prerequisite*: 555 or permission of the instructor)

S(2-3)

**FORB 557 (1½) ENVIRONMENTAL MEASUREMENTS**

Techniques and instruments to measure soil and plant water status and the physical micro-environment in the field, growth chamber, and greenhouse. Topics will include measurement fundamentals, physical fundamentals, temperature, radiation, humidity and water content, wind speed, heat and mass transfer, data loggers, interpretation and analysis of data.

F(3-0)

**FORB 560 (1½) FOREST BIOLOGY SEMINAR**

Student and guest seminars on selected topics in forest biology and forest biotechnology and regeneration. Required of all graduate students in forest biology every year of their degree program (except by Departmental permission)

FS(3-0)

**FORB 570 (1½) ADVANCED TOPICS IN FOREST BIOLOGY**

May be taken more than once for credit in different topics. Pro forma required.

**MARINE SCIENCE****MRNE 500 (1-6) DIRECTED STUDIES****MRNE 501 (3) SPECIAL TOPICS****MRNE 502 (1½) SPECIAL TOPICS**



## BUSINESS

### MASTER OF BUSINESS ADMINISTRATION PROGRAM

The Faculty of Business offers both full-time and part-time programs of study leading to the Master of Business Administration degree. The multidisciplinary program is designed to provide practising or potential business professionals and managers with the analytical expertise and practical knowledge to distinguish themselves in the business sector. Students will gain a comprehensive understanding of the functional business disciplines, along with the opportunity to specialize in one of the following areas: Entrepreneurship and Small Business Management, Tourism Management, International Business Management, or General Business Management.

#### Admission

Admission applications are welcome from any person who has received, or is about to receive, a baccalaureate degree from a recognized Canadian university, or foreign equivalent, with an academic standing acceptable to the School, and the Faculty of Graduate Studies (see Admission to Master's Degrees, section 1.3). The program does not require an extensive background in business or economics. Work experience in any professional or managerial capacity however, is considered to be an asset. Applicants must also submit a GMAT (Graduate Management Admission Test) score, two letters of reference, a history of work experience, and two typed essays (details will be provided with application material). Applicants are advised that enrollment in this program is limited.

### PROGRAM OF STUDIES

The University of Victoria's M.B.A. program consists of four modules and an option of one or two Co-op work terms, and is generally completed in 17 months. It is an innovative program which emphasizes a high degree of integration among business functional areas.

The regular degree program consists of 26 units. Individual programs of study may differ, but in no case will the M.B.A. degree be awarded on the basis of fewer than 21 units of study (including the report requirement) accepted for graduate credit at the University of Victoria. At least 2 elective units must be taken within the Faculty of Business.

For applicants wishing to pursue a part-time M.B.A., upon admission to the program, a program of study will be developed to suit the student's particular circumstance. The only constraints to the part-time M.B.A. program are that (i) the students will be required to attend the Preparation Module in the year they are admitted to the program; and (ii) the students will be required to attend the Specialization Module on a full-time basis on campus. The courses from the Foundation and Creative Modules will be taken in the interim. The time frame for the completion of the degree has to meet the Faculty of Graduate Studies maximum limit of 5 years (see Faculty of Graduate Studies, Section 5.2).

#### Co-operative Education Program Option

The M.B.A. program has a program option for co-operative education in which students without relevant work experience will be required to participate. Depending on the background of the student, the co-op work term requirement could be from four to eight months. In the case of the four month co-op, students will complete the co-op work term between the third and fourth modules. For the eight month co-op option, arrangements will be made for the student to complete a second four month work term.

#### Performance Requirement

See Faculty of Graduate Studies, Section 5.4.

### GRADUATE COURSES AND REQUIREMENTS

The content of the M.B.A. program is arranged into four modules to facilitate the integration of the diverse functional business disciplines.

1. Preparation Module
2. Foundation Module
3. Creative Module
4. Specialization Module

#### Preparation Module

This four week, one hundred and forty hour, module contains three required, non-credit subjects which are evaluated on a pass/fail basis.

Computer and Analytical Review  
Managerial Negotiation and Presentation Skills  
Management and the Business Environment

#### Foundation Module

This module contains six required courses with an aggregate value of eight units.

MBA 553 Organizational Design and Analysis  
MBA 515 Applied Managerial Economics  
MBA 520 Financial and Managerial Accounting  
MBA 530 Managerial Finance  
MBA 535 Production and Management Science  
MBA 540 Applied Data Analysis and Forecasting

#### Creative Module

This module contains seven required courses with an aggregate value of eight units.

MBA 544 Strategic Information Technology  
MBA 550 Business Policy and Strategy I  
MBA 510 Marketing Management  
MBA 555 Managing Human Resources  
MBA 559 Applied Corporate Law  
MBA 570 International Business Environment  
MBA 585 Applied Research and Consulting Methods

#### Specialization Module

This module contains two required courses and five electives. The electives will be available subject to student demand and faculty availability. Completion of the Foundation and Creative Modules is required before taking the following courses (or the permission of the School).

MBA 551 Business Policy and Strategy II (Required)  
MBA 557 Business-Government Interactions (Required)  
MBA 554 Managing Organizational Change  
MBA 556 Power and Politics in Organizations  
MBA 571 International Financial Strategies  
MBA 572 Strategic International Marketing  
MBA 573 Managing in a Cross-Cultural Environment  
MBA 560 Management Issues in Tourism  
MBA 561 International Tourism  
MBA 562 Consumer Behaviour in Tourism Management  
MBA 563 Services Marketing in Tourism Management  
MBA 565 Management of Innovation  
MBA 566 Entrepreneurship and New Ventures  
MBA 567 Strategic Analysis of Small Business  
MBA 588 Study Abroad  
MBA 590 Directed Study  
MBA 595 Special Topics in Business Administration

#### The Report Requirement — MBA 598 or MBA 596

This course has a 3 unit value, and is generally started after the Creative Module. The report must be completed by the end of the Specialization Module.

#### Faculty and Major Areas of Research

|   |  |
|---|--|
| David A. Boag, Ph.D.<br>(Toronto)         | Marketing, entrepreneurship  |
| Nailin Bu, Ph.D.<br>(British Columbia)    | Organizational analysis and international business                             |
| Tim Craig, Ph.D.<br>(Washington)          | Business policy and strategy, international business                           |
| Ali Dastmalchian, Ph.D.<br>(Wales)        | Organizational design, management of innovation                                |
| A. Elangovan, Ph.D.<br>(Toronto)          | Organizational analysis, negotiation and conflict management, entrepreneurship |
| Rebecca Grant, Ph.D.<br>(Western Ontario) | Management information systems, information privacy, employee monitoring       |



|  |   |
|--|---|
| Thomas Lawrence, Ph.D.<br>(Alberta)              | Business policy and strategy  |
| David McCutcheon, Ph.D.<br>(Western Ontario)     | Production and operations management, technology and innovation management  |
| Will McNally, Ph.D.<br>(Toronto)                 | Corporate finance   |
| Peter E. Murphy, Ph.D.<br>(Ohio State)           | Tourism and marketing   |
| Sanghoon Nam, Ph.D.<br>(Oregon)                  | Organizational analysis, human resource management, international business  |
| Ignace Ng, Ph.D.<br>(Simon Fraser)               | Human resource management and international business  |
| Mark Pritchard, Ph.D.<br>(Oregon)                | International tourism and marketing   |
| J. Brock Smith, Ph.D.<br>(Western Ontario)       | Marketing, team selling, entrepreneurship and small business management   |
| F. Ian Stuart, Ph.D.<br>(Western Ontario)        | Production and operations management, total quality management and purchasing management                          |
| Stephen S. Tax, Ph.D.<br>(Arizona State)         | Marketing, services management, entrepreneurship and small business management                                    |
| Angela M. Tripoli, Ph.D.<br>(California, Irvine) | Organizational analysis, individual performance and effectiveness, entrepreneurship and small business management |

## GRADUATE COURSES

Note: The basic prerequisite for courses in the Specialization Module is the completion of the Foundation and the Creative Modules (or the permission of the School). Specialization Module Courses are offered subject to enrollment and the availability of faculty.

### MBA 510 (1½) MARKETING MANAGEMENT

Controllable and uncontrollable marketing variables that managers face in today's business environment. Topics include factors affecting consumer demand and methods of satisfying it, market structure, and product selection, distribution, promotion, pricing and market research. The course structure, exercises, projects and case problems are all designed to develop the students' ability to generate effective marketing strategies in the face of uncertainty.

### MBA 515 (1½) APPLIED MANAGERIAL ECONOMICS

Applies economic principles to the analysis of corporate problems. Topics include product, risk and business opportunity analysis, production costs and profit maximization, the determination of prices and output under different market structures, investment decisions, and economic forecasting.

### MBA 520 (1½) FINANCIAL AND MANAGERIAL ACCOUNTING

The external analysis of corporate financial reports, focusing on the reconstruction of financial events from published accounting statements. Topics also include short term financial decisions, and discussion of the nature, analysis and control of costs, product costing, and the use of accounting information in management decisions.

### MBA 530 (1½) MANAGERIAL FINANCE

Discussion of the techniques used to maximize the value of the firm, including short and long-range sources of funds, the valuation of financial assets and liabilities, working capital management, capital structure, costs of capital, capital-budgeting decisions, dividend policy, the relationship between risk and return, portfolio theory, the financial evaluation of business opportunities, and a survey of financial securities.

### MBA 535 (1) PRODUCTION AND MANAGEMENT SCIENCE

An introduction to the basic concepts of model building, and the role of models in managerial decision making. Topics include identifying constraints, formalizing trade-offs, providing for uncertainty, conducting sensitivity analysis, as well as developing analytical and decision making skills in an operating environment. In addition topics relevant to service and manufacturing operations, include workflow planning, inventory management, scheduling, quality control, facilities and equipment, and investment planning are included.

### MBA 540 (1) APPLIED DATA ANALYSIS AND FORECASTING

A survey of the concepts and techniques used in the analysis and interpretation of data for managerial decision making. Experimental design, sampling and statistical testing procedures are discussed. Statistical software is utilized extensively. A heavy emphasis is placed on multiple regression and forecasting.

### MBA 544 (1) STRATEGIC INFORMATION TECHNOLOGY

A discussion of the capability and effective utilization of management information technology, and the role of this technology as a component of corporate strategy. Topics include computing hardware, software, telecommunications, databases, the management of information systems, including their development and implementation, the conditions under which information technologies can be effectively applied, and how to avoid the more frequent problems associated with the application of this rapidly evolving technology.

### MBA 550 (1½) BUSINESS POLICY AND STRATEGY I

Introduces the integrative nature of management. It deals with the overall general management of the organization, and the formulation, development and implementation of the strategic direction of the firm. This course intends to develop an appreciation of the role of a general manager from a conceptual as well as an operational standpoint.

### MBA 551 (1½) BUSINESS POLICY AND STRATEGY II

Builds on MBA 550, and expands the discussion of strategic management. Through case analysis and examination of the strategic issues of various organizations, this course stresses the inter-relationships among business functional areas, role of top management, organization culture, and ethical and socially responsible behaviour of the firm. (Prerequisite: MBA 550)

### MBA 553 (1½) ORGANIZATIONAL DESIGN AND ANALYSIS

Examines the behaviour of individuals, groups and total organizations from the standpoint of organizational design. Topics covered include: development of management thoughts; organizational structure and design; individual perception, motivation and job satisfaction; group processes; leadership and organizational culture.

### MBA 554 (1) MANAGING ORGANIZATIONAL CHANGE

Organizational structure and intra-organizational patterns will be discussed. Interaction between organizations and external environments as a source of change in organizational goals, strategies, structures and performance will be examined. Approaches to achieve and facilitate organizational change will be closely analyzed. (Prerequisite: MBA 553)

### MBA 555 (1½) MANAGING HUMAN RESOURCES

A review of the literature in the field of personnel administration. Special emphasis will be placed on contemporary practices in the selection, placement and compensation of personnel. (Prerequisite: MBA 553)

### MBA 556 (1) POWER AND POLITICS IN ORGANIZATIONS

Introduces organizational power and politics by: 1) developing an awareness of the reality and importance of the phenomena; 2) discussing a selection of power tactics at the individual level and strategies at the departmental/group level; and 3) views power and politics as a managerial reality that needs to be taken into account in attempting to manage the processes of organizational change. (Prerequisite: MBA 553)

### MBA 557 (1½) BUSINESS-GOVERNMENT INTERACTIONS

Management of the interaction between business and government is examined by analyzing the decision processes of government and business. Business strategies and their impact on the public sector, as well as the government measures which affect business are analyzed. Current issues and developments are also analyzed.



**MBA 559 (1/2) APPLIED CORPORATE LAW**

A focus on contract law, product liability law, the law of sales, intellectual property law, and the legal description of corporations and partnerships. Emphasis is placed on the strategic application of corporate law to the business environment.

**MBA 560 (1) MANAGEMENT ISSUES IN TOURISM**

This course introduces major management contexts and issues within the tourism industry, examining the process of business decision-making at both the company and destination levels. Topics include discussion of the organizing function, the leading function, and the controlling function, with examples and cases from the tourism industry. The course concludes by examining the environmental forces and social responsibilities facing this industry and how it can remain competitive in a changing world.

**MBA 561 (1) INTERNATIONAL TOURISM**

This course focuses on the significance and business opportunities of international tourism. It examines the economic, political, legal and cultural factors impacting on management practices in tourism organizations and businesses operating in the international environment. In this context, students will be made aware of the importance of cross-cultural management and organization of tourism operations in the global arena, with specific attention to the Asia-Pacific region.

**MBA 562 (1) CONSUMER BEHAVIOUR IN TOURISM MANAGEMENT**

The nature of today's competitive marketplace has forced management to deliver product benefits, change brand attitudes and influence consumer perceptions. Tourism management plans must be based on the psychological and social forces that are likely to condition travel consumer behaviour — that is, what goes on inside the consumer's head. This course provides an understanding of the travel consumer's needs, perceptions, attitudes, intentions, and behaviour within a strategic and managerial framework.

**MBA 563 (1) SERVICES MARKETING IN TOURISM MANAGEMENT**

The focal point of this course is the application of marketing concepts and principles to the service industry, with the objective of developing marketing strategies and plans unique to travel and tourism enterprises. The course presents a comprehensive coverage of the services marketing concept along with contemporary topics such as service quality and societal marketing. A variety of travel and tourism cases are used to exemplify "competitive edge" strategies in services marketing.

**MBA 565 (1) MANAGEMENT OF INNOVATION**

History of innovations, technology forecasting, management of research and development, problems with labour acceptance of innovation.

**MBA 566 (1) ENTREPRENEURSHIP AND NEW VENTURES**

Covers the entrepreneurial process from conception to birth of a new venture. It concentrates on attributes of entrepreneurs, searching for opportunities, and gathering resources to convert opportunities into business. Students learn how to evaluate entrepreneurs and their plans for new business. Students work in teams to write a business plan for a new venture.

**MBA 567 (1) STRATEGIC ANALYSIS OF SMALL BUSINESS**

Situational analysis, definition of explicit/implicit goals, objectives, strategies, market and industry position, competitive financial and organizational status, critical areas of operation and technological threats; development of analytical capabilities in unprogrammed situations, applications of theory and the integration of technical and managerial inputs to strategic planning and decision making in line problem areas; development of solutions and their effective communication to corporate decision makers; consulting and advisory roles and methods.

**MBA 570 (1) INTERNATIONAL BUSINESS ENVIRONMENT**

An introduction to the international business environment. Topics include managerial techniques and corporate structure in selected foreign countries, problems of adaption to different cultural, political, sociological, legal and economic environments, and an analysis of the key managerial problems encountered by multinational firms.

**MBA 571 (1) INTERNATIONAL FINANCIAL STRATEGIES**

An examination of international financial markets, and the financial decision making and planning of multinational firms. Topics include exchange rate volatility, determination and forecasting, central bank operations, barriers to international investment, portfolio management, differing tax and regulatory regimes, political risk, and risk management techniques. (*Prerequisite:* 530)

**MBA 572 (1) STRATEGIC INTERNATIONAL MARKETING**

An examination of the strategic implications of international marketing. Joint emphasis is placed on evaluation and utilizing international market opportunities, and defending against foreign competition at home. Topics include the problems associated with managing diverse markets at great distances, cultural implications in the analysis of consumer motivations, institutional differences, and developing marketing strategies. (*Prerequisite:* 510)

**MBA 573 (1) MANAGING IN A CROSS-CULTURAL ENVIRONMENT**

Illustrates the effect of culture on managerial style, and the cross-national complications of negotiation and national regulation. Emphasis will be placed on Asian management strategies and issues.

**MBA 585 (1) APPLIED RESEARCH AND CONSULTING METHODS**

A discussion of research and consulting methods to resolve corporate problems. Topics include research design and methodology, data collection and analysis, industry analysis, company analysis, issue analysis, implementation and feedback, the consulting process, method and analysis. The course is designed to prepare students for MBA 598 and MBA 596.

**MBA 588 (1-7 1/2) STUDY ABROAD**

Students register in this course while participating in a formal academic exchange with a university outside of Canada.

**MBA 590 (1-3) DIRECTED STUDY**

(May be taken more than once in different subject areas, with the permission of the Director)

**MBA 595 (1-5) SPECIAL TOPICS IN BUSINESS ADMINISTRATION**

The course content will reflect the interests of the faculty members and current issues in business and industry. Topics may vary annually. Students may be permitted to take this course more than once for credit, provided that the content is different from that previously taken.

**MBA 596 (3) MANAGEMENT CONSULTING REPORT**

A group consulting report. Participating students are placed into small teams and under faculty supervision, maintain a consulting/client relationship with a corporate sponsor. The student teams examine a problem of current interest to the sponsor and prepare detailed oral and written recommendations. (Grading: INP, COM, N or F)

**MBA 598 (3) RESEARCH REPORT**

A substantial analysis of a significant management problem or policy issue, prepared individually in consultation with a faculty advisor. (Grading: INP, COM, N or F)

## CHEMISTRY

The Department offers programs of study leading to the degrees of Master of Science and Doctor of Philosophy. Research areas include the following: Organometallic chemistry; transition metal chemistry; inorganic photochemistry; bio-inorganic chemistry; multinuclear NMR

studies; crystallography; kinetics and mechanisms; mass spectrometry; ion transport phenomena; electrochemistry; surface science; laser chemistry; spectrometry of expanding jets and molecular beams; photophysics; electronic spectroscopy; environmental chemistry; organic



chemistry; organic photochemistry; physical organic chemistry; synthetic organic chemistry; natural products.

The Department is exceptionally well equipped. Major items of instrumentation serving both teaching and research needs include: two Nonius X-ray diffractometers, a VAX station 3100 and alpha work station; five NMR instruments including Bruker 360MHz and 250MHz systems equipped for multinuclear and variable temperature work; a Kratos Concept IH mass spectrometer system with EI/CI/FAB sources, GC/MS interface with autosampler and a Finnigan GC-Mass spectrometer with CI/EI sources, data acquisition system and negative ion capability; a Bruker E200t ESR spectrometer with ENDOR facilities; an ultra high vacuum surface science apparatus with LEED, AES TDS ESDIAD and workfunction; electrochemical systems from PAR and Metrohm; a Baird-Atomic 1.5m stigmatic grating spectrograph and a Jarrell-Ash 3.4m Ebert grating spectrograph; a J-Y laser Raman spectrometer; nano- and picosecond laser flash photolysis systems; a Perkin-Elmer MPF66 spectrofluorometer; a Perkin-Elmer DSC7 Differential Scanning Calorimeter, a Perkin-Elmer 141 polarimeter, a full range of UV/Vis, IR, FTIR spectrophotometers; liquid (analytical and preparative) and gas chromatographs; high pressure hydrogenation apparatus.

Students admitted to M.Sc. (or Ph.D.) programs in Chemistry who do not have the equivalent of an Honours degree will be required to make up any deficiencies by enrolling for credit in sufficient of the fourth year undergraduate courses CHEM 411, 424, 425, 433, 434, 444 and 446 to give them three units of credit in their major area of specialty, and at least 1½ units of credit in each of two other areas. Such makeup course requirements are additional to those required for the graduate degree.

Because of the varied backgrounds of students entering graduate school, the Department requires all entering graduate students to take a set of orientation examinations soon after their arrival. Students showing deficiencies in their knowledge of fundamental chemistry will be required to make good the deficit by approved reading or by taking and passing the appropriate undergraduate courses. Failure to achieve a minimum of B- in an undergraduate chemistry course will normally result in the student being asked to withdraw.

For those applicants whose native language is not English, a minimum acceptable T.O.E.F.L. score is 575.

Students for graduate degrees are required to complete Chemistry 599 (M.Sc. Thesis) or 699 (Ph.D. Dissertation). They are also required to take 509 (Seminar) throughout their period of registration.

- i) Candidates for M.Sc. degrees will normally be required to complete 3 units of graduate lecture courses and 4.5 units of discussion courses chosen from 522 (A-D), 630 (A-D), or 644 (A-D).
- ii) Candidates for Ph.D. degrees will normally be required to complete 6 units of graduate lecture courses and 9 units of discussion courses chosen from 522 (A-D), 630 (A-D), or 644 (A-D).

An integral part of their program, students are required to undertake teaching assistantships or equivalent duties within the Department.

#### Faculty and Major Fields of Research

|  |  |
|--|--|
| Walter J. Balfour, Ph.D.<br>(McMaster), D.Sc. (Aberdeen) | Electronic spectroscopy  |
| David Berg, Ph.D.<br>(Berkeley)                          | Synthetic organolanthanide chemistry   |
| Cornelia Bohne, Ph.D.<br>(Sao Paulo)                     | Photochemistry, dynamics in organized systems, mechanisms and kinetics, physical organic chemistry |
| Gordon W. Bushnell, Ph.D.<br>(West Indies)               | Crystallography, bio-inorganic chemistry; proteins; nucleic acids; coordination compounds          |
| Thomas W. Dingle, Ph.D.<br>(Alberta)                     | Theoretical chemistry  |
| Keith R. Dixon, Ph.D.<br>(Strathclyde)                   | Transition metal and organometallic chemistry, metal clusters; multi-nuclear magnetic resonance    |
| Alfred Fischer, Ph.D.<br>(New Zealand)                   | Physical organic chemistry   |

Thomas A. Fyles, Ph.D.  
(York)

Terence E. Gough, Ph.D.  
(Leicester)

David A. Harrington, Ph.D.  
(Auckland)

Martin B. Hocking, Ph.D.  
(Southampton)

Alexander D. Kirk, Ph.D.  
(Edinburgh)

Alexander McAuley, Ph.D.,  
D.Sc. (Glasgow)

Reginald H. Mitchell, Ph.D.  
(Cambridge)

Gerald A. Poulton, Ph.D.  
(Saskatchewan)

Charles X.W. Qian, Ph.D.  
(Southern California)

Stephen R. Stobart, Ph.D.  
(Nottingham)

Peter C. Wan, Ph.D.  
(Toronto)

Paul R. West, Ph.D.  
(McMaster)

Supramolecular chemistry, design, synthesis and characterization of membrane transport systems. Membrane separations. Environmental data management

Infrared and visible laser spectrometry of expanding jets and molecular beams; photodynamics of van-der-Waals molecules and clusters

Electrochemistry, surface science, thin film deposition and materials science

Organic polymers, pulping and bleaching chemistry, environmental chemistry

Inorganic photochemistry, photophysics, spectroscopy and energy transfer processes

Inorganic kinetics and mechanisms — solvolysis and redox reactions; bioinorganic chemistry; heavy metal toxicity

Synthesis of novel aromatic hydrocarbons; their environmental effects and their metal complexes as potentially interesting conductors

Natural products; synthetic organic chemistry

State-to-state photodissociation and reaction dynamics in gas phase, laser spectroscopy

Electronic structure and reactivity of binuclear transition metal complexes; organometallic chemistry and catalysis

Organic photochemistry; reactive intermediates; physical organic chemistry

Electron spin resonance; organic free radical reaction mechanisms; environmental chemistry

## GRADUATE COURSES

*Students should consult the Department to determine the graduate courses offered in any particular year.*

**CHEM 509 (1) SEMINAR** (Grading: INP, COM, N or F)

**CHEM 510 (1½ or 3) INSTRUMENTATION**

**CHEM 522 (1½ or 3) CURRENT TOPICS IN INORGANIC CHEMISTRY**  
(Offered as 522A, 522B, 522C, 522D)\*

**CHEM 523 (1½ or 3) ORGANOMETALLIC CHEMISTRY**

**CHEM 525 (1½ or 3) THEORETICAL INORGANIC CHEMISTRY**

**CHEM 526 (1½ or 3) TOPICS IN ADVANCED INORGANIC CHEMISTRY**

**CHEM 533 (1½ or 3) ORGANIC SYNTHESIS**

**CHEM 536 (1½ or 3) ORGANIC PHOTOCHEMISTRY AND PHOTOPHYSICS**

**CHEM 538 (1½ or 3) SUPRAMOLECULAR CHEMISTRY**



**CHEM 545 (1½ or 3) REACTION KINETICS AND REACTION RATE THEORY****CHEM 546 (1½ or 3) PHOTOCHEMISTRY AND PHOTOPHYSICS****CHEM 547 (1½ or 3) CHEMICAL APPLICATIONS OF LASERS****CHEM 548 (1½ or 3) MOLECULAR SPECTROSCOPY****CHEM 550 (1½ or 3) CHEMICAL APPLICATIONS OF GROUP THEORY****CHEM 554 (1½ or 3) QUANTUM MECHANICS****CHEM 555 (1½ or 3) STATISTICAL MECHANICS****CHEM 556 (1½ or 3) TOPICS IN ADVANCED PHYSICAL CHEMISTRY****CHEM 565 (1½ or 3) THEORY AND APPLICATION OF NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY****CHEM 566 (1½ or 3) CRYSTALLOGRAPHY AND CHEMISTRY OF THE SOLID STATE****CHEM 590 (1-3) DIRECTED STUDIES****CHEM 599 (12) M.Sc. THESIS** (Grading: INP, COM, N or F)**CHEM 630 (1½ or 3) CURRENT TOPICS IN ORGANIC CHEMISTRY** (Offered as 630A, 630B, 630C, 630D)\***CHEM 633 (1½ or 3) TOPICS IN ADVANCED ORGANIC CHEMISTRY****CHEM 634 (1½ or 3) ADVANCED PHYSICAL ORGANIC CHEMISTRY****CHEM 636 (1½ or 3) CHEMISTRY OF HETEROCYCLIC COMPOUNDS****CHEM 638 (1½ or 3) CHEMISTRY OF NATURAL PRODUCTS****CHEM 644 (1½ or 3) CURRENT TOPICS IN PHYSICAL CHEMISTRY** (Offered as 644A, 644B, 644C, 644D)\***CHEM 645 (1½ or 3) ADVANCED ELECTROCHEMISTRY****CHEM 646 (1½ or 3) SURFACE SCIENCE****CHEM 647 (1½ or 3) MATERIALS SCIENCE****CHEM 699 (33) PH.D. DISSERTATION** (Grading: INP, COM, N or F)  
\* May be taken more than once for credit.

## CLASSICS

The Department of Classics offers a two year program of studies leading to the degree of Master of Arts in Classics. Course work will include both Greek and Latin language and literature, but the thesis may be written in the areas of Greek Literature, Latin Literature, Ancient History, or Classical Archaeology.

A minimum of 15 units of work from Classics Department offerings is required for the M.A. degree. In the first year of study the candidate will take a full load of course work, consisting of current offerings at the 500 level and a supplement of recommended upper level undergraduate courses. The Department Pro-Seminar, Classics 485, is required of M.A. students who have not taken that course for undergraduate credit. In the second year of study the candidate will write a thesis of 6-9 unit value and complete course work requirements at the 500 level. Candidates should note that University regulations require that at least 12 units of work at the 500 level are required for the M.A. degree. There will be a final oral examination on the thesis. Proficiency in reading either French or German or Italian must be demonstrated. For further information please consult the Graduate Adviser of the Department.

### Faculty and Fields of Research

|  |   |
|--|---|
| Laurel M. Bowman, Ph.D.<br>(California, Los Angeles) | Greek tragedy, Hellenistic poetry, ancient religion   |
| Keith R. Bradley, B. Litt.<br>(Oxford), F.S.A.       | Roman history, especially Late Republic and Early Empire; Roman social relations; Roman historians and historiography |
| John G. Fitch, Ph.D.<br>(Cornell)                    | Greek and Roman drama, especially Seneca; Didactic poetry   |
| Ingrid E. Holmberg, Ph.D.<br>(Yale)                  | Homer and early Greek poetry; critical theory, especially feminist  |
| John P. Oleson, Ph.D.<br>(Harvard), F.R.S.C.         | Ancient technology, maritime archaeology, Near East and Roman architecture  |
| Samuel E. Scully Ph.D.<br>(Toronto)                  | Greek epic and tragedy  |
| Gordon S. Shrimpton, Ph.D.<br>(Stanford)             | 5th and 4th century Greek history and historiography  |
| Peter L. Smith, Ph.D.<br>(Yale)                      | Roman comedy; Augustan Latin poetry   |

## GRADUATE COURSES

Three of the following courses will be offered each academic year, and offerings will rotate according to availability of faculty and student needs. Students shall make their choices in consultation with the Graduate Adviser.

**CLAS 511 (1½) EARLY GREEK LITERATURE****CLAS 512 (1½) GREEK DRAMA****CLAS 513 (1½) CLASSICAL GREEK PROSE****CLAS 521 (1½) ROMAN COMEDY AND SATIRE****CLAS 522 (1½) ROMAN PROSE OF THE LATE REPUBLIC****CLAS 523 (1½) LATE REPUBLICAN AND AUGUSTAN POETRY****CLAS 524 (1½) POST-AUGUSTAN POETRY****CLAS 525 (1½) POST-AUGUSTAN PROSE****CLAS 541 (1½) GREEK HISTORY****CLAS 542 (1½) ROMAN HISTORY****CLAS 543 (1½) CLASSICAL ARCHAEOLOGY****CLAS 590 (1½) DIRECTED INDIVIDUAL STUDY**

**CLAS 599 (6-9) M.A. THESIS** (Grading: INP, COM, N or F)  
Before beginning the thesis the candidate must arrange with the supervisory committee and the Graduate Adviser the number of units to be assigned.



## COMPUTER SCIENCE

### Program

The Department of Computer Science offers a graduate program leading to the degree of Master of Arts (M.A.) or Master of Science (M.Sc.) in Computer Science and to the degree of Doctor of Philosophy (Ph.D.) in Computer Science. The Department also participates in the Cooperative Education program. Faculty members in the Department are pursuing research in areas that include Software Engineering, Software Systems, Theory of Computing, Programming Languages, Distributed Computing, Logic Programming, VLSI Design and Test, and Numerical Analysis.

The program of study for each student is determined by the student's supervisory committee in consultation with the student. Normally, each graduate student is required to work as a teaching and/or research assistant as part of their program. The Master's Program consists of a minimum of 15 units which includes course work, a seminar course (C SC 595) and a Master's thesis (C SC 599). In certain circumstances, students may register for a Master's project (C SC 598) instead of a thesis. At least 12 units of the Program must be at the 500 level or higher. The remaining units must be at the 400 level or higher. The Master's thesis must be defended in an oral examination. A student who chooses the project option will also have an oral examination. This examination will cover the project as well as material from three courses chosen by the student's supervisory committee in consultation with the student.

Individuals interested in the Cooperative Master's degree should contact the Graduate Adviser of the Computer Science Department for details about that program.

Applicants for a Master's Program in the Department should have a major or honours degree in Computer Science (or its equivalent) or a major or honours degree in Mathematics with an emphasis on Computer Science. A student who does not have such a degree can be admitted to the program, but may be required to complete additional makeup courses. In doing so, the student must obtain a grade of at least B (5.00) in each such makeup course, and an average B+ (6.00) overall in the makeup courses. Mature students are advised to consult the Faculty regulations regarding conditional admittance.

A student must normally have completed a Master's Degree in Computer Science, or the equivalent, before entering the Ph.D. Program. For students entering with a Master's Degree, the Ph.D. program consists of a minimum of six units of course work and a dissertation (C SC 699). For students transferred to the Ph.D. Program with a Bachelor's Degree, a minimum of 12 units of course work and a dissertation are required. A Ph.D. program must include the seminar course (C SC 595) unless the student has already taken an equivalent seminar course. Each student must satisfy the Ph.D. Breadth Requirements as specified in the Department Ph.D. Regulations. Each student must pass the Ph.D. candidacy examination within two years of first registering as a provisional Doctoral student and at least six months before the Ph.D. Dissertation is defended in an oral examination.

### Facilities

The Department offers its graduate students a wide range of equipment for study and research. This equipment includes several multi-user machines supporting UNIX, as well as Sun workstations (monochrome and colour), an IBM 3090 mainframe and laser printers. There are also numerous microcomputers of various kinds available for specific research projects. The Sun workstations and other UNIX computers are connected with Ethernet, and can also be accessed from remote terminals.

### Applications

Initial inquiries regarding graduate studies in Computer Science should be addressed to the Graduate Admissions Committee, Department of Computer Science. Application forms may be obtained from the Graduate Admissions and Records Office.

### Faculty and Fields of Research

|  |  |
|--|--|
| Mantis H.M. Cheng, Ph.D.<br>(Waterloo) | Logic and functional programming; theories of concurrency, real-time systems |
| John A. Ellis, Ph.D.<br>(Northwestern) | Theoretical computer science, computational complexity, algorithms           |

|  |  |
|--|--|
| Michael R. Fellows, Ph.D.<br>(Calif.-San Diego)        | Computational complexity theory, combinatorial algorithms  |
| Daniel M. Hoffman, Ph.D.<br>(N. Carolina, Chapel Hill) | Software engineering   |
| R. Nigel Horspool, Ph.D.<br>(Toronto)                  | Compiler construction, programming languages, operating systems  |
| Bruce Kapron, Ph.D.<br>(Toronto)                       | Theory of programming languages; logic; computational complexity   |
| Valerie King, Ph.D.<br>(California, Berkeley)          | Concrete complexity; randomized algorithms and lower bounds  |
| Michael R. Levy, Ph.D.<br>(Waterloo)                   | Programming languages; abstract data types; logic programming  |
| Eric G. Manning, Ph.D.<br>(Illinois)                   | Computer networks; distributed computing   |
| D. Michael Miller, Ph.D.<br>(Manitoba)                 | Fault diagnosis, design for testability, computer aided design for VLSI systems, multiple valued logic                                     |
| Hans A. Muller, Ph.D.<br>(Rice)                        | Software Engineering; programming in the large; programming environments; programming languages, computational geometry, computer graphics |
| Jon C. Muzio, Ph.D.<br>(Nottingham)                    | VLSI design and test, fault tolerant computing, design for testability, multiple valued systems  |
| Wendy Myrvold, Ph.D.<br>(Waterloo)                     | Graph theory, graph algorithms, network reliability, graph reconstruction  |
| D. Dale Olesky, Ph.D.<br>(Toronto)                     | Numerical linear algebra, matrix theory  |
| Frank D. K. Roberts, Ph.D.<br>(Liverpool)              | Combinatorial algorithms   |
| Frank Ruskey, Ph.D.<br>(Calif., San Diego)             | VLSI design, fault tolerant computing, multiple valued systems   |
| Micaela Serra, Ph.D.<br>(Victoria)                     | Distributed and real time operating systems, computer communications   |
| Gholamali C. Shoja, D.Phil.<br>(Sussex)                | Logic programming  |
| Maarten van Emden, Ph.D.<br>(Amsterdam)                | Dataflow computation, nonprocedural languages, semantics; data types, symbolic logic   |
| William W. Wadge, Ph.D.<br>(Calif.-Berkeley)           |  |

## GRADUATE COURSES

Students may register for graduate courses only with the approval of the instructor and after consultation with their supervisor. Not all of the following courses will be offered every year. Students who have taken content equivalent courses at the University of Victoria or elsewhere will not be permitted to take these courses again for credit.

### C SC 500 (no credit) APPLICATIONS OF COMPUTERS IN RESEARCH

This course provides the introduction to computing that is necessary for some theses projects. It is not open to students registered in a Computer Science degree program.



**C SC 505 (1½) COMPUTER GRAPHICS**

This course provides students with a solid background in interactive, generative graphics techniques and hands on experience programming a modern high resolution, raster display workstation. The course covers the hardware and software structures of modern workstations, raster algorithms and data structures (Bresenham's line and circle algorithms, polygon clipping, region filling, colour), transformations (two and three dimensional translation, scaling, and rotation as matrix operations), viewing and representation of three dimensional shapes, approximation of curves and shapes, hidden line and hidden surface elimination algorithms.

**C SC 520 (1½) ANALYSIS OF ALGORITHMS**

General techniques for designing and analysing algorithms; an in depth examination of several problems and algorithms with respect to their time and space requirements; advanced data structures; sorting and searching; graph algorithms; geometric algorithms; backtracking; NP complete problems; approximation algorithms.

**C SC 521 (1½) PARALLEL ALGORITHMS AND ARCHITECTURES**

The course studies: algorithms for massively parallel, SIMD machines; particular kinds of architectures, for example: grids, butterflies, hypercubes, as well as abstract models, for example: the PRAM; simulations of one architecture by another; how to map problems of unlimited size onto a machine of fixed size; elements of parallel complexity theory that can indicate what kind of problems can benefit from parallelisation.

**C SC 522 (1½) GRAPH ALGORITHMS**

The course includes a detailed study, from the algorithmic point of view of some tractable and intractable graph problems. Tractable problems covered include: path problems, spanning trees, network flows, matchings, planarity testing.

The theory of NP completeness is reviewed and applied to graph problems which are apparently intractable, e.g. the clique, independent set, vertex cover, Hamiltonian circuit, Travelling Salesman and colouring problems. Approximation and probabilistic solutions to the intractable problems are discussed.

Models of randomized and parallel computation and their associated complexity classes are outlined and examples of these kinds of algorithms for some graph problems are examined.

**C SC 523 (1½) RANDOMIZED ALGORITHMS**

Basic techniques in design and analysis of randomized algorithms: moments and deviations, Markov chains and random walks, martingales, and algebraic techniques. Other topics include: the probabilistic method, random structures, and complexity. Applications are selected from: parallel algorithm, routing networks, combinatorial optimization, data structure, approximate solutions to intractable problems, cryptography, pattern matching, and computational geometry.

**C SC 524 (1½) COMPUTATIONAL COMPLEXITY**

The course covers elements of the theory of computational complexity. Topics covered include: the distinction between tractable and intractable problems; definition of computational models and complexity classes; techniques for comparing the complexity of problems; the classes P (deterministic polynomial time); and NP (nondeterministic polynomial time); P and NP completeness; Auxiliary Pushdown Automata; Alternating Turing Machines; the polynomial time hierarchy; the classes Polynomial Space and Logarithm Space; probabilistic complexity classes; models of parallel computation; can all problems in P be effectively parallelized? Randomized parallel computation.

**C SC 526 (1½) COMPUTATIONAL GEOMETRY**

This introductory course covers algorithms and data structures which are used to solve geometrical problems. Topics include geometric searching, convex polygons and hulls, Voronoi diagrams, plane sweep algorithms, promity, and intersections. Application areas which are discussed include computer graphics, VLSI design and graph theory.

**C SC 528 (1½) COMBINATORIAL ALGORITHMS**

This course is concerned with the interfaces between combinatorics and Computer Science. Algorithms and data structures that are used to manipulate, generate, and randomly select combinatorial objects are studied. Such objects include sets, permutations, combinations, trees, graphs. Methods for analyzing combinatorial algorithms such as recurrence relations, asymptotics, and amortized complexity are presented.

**C SC 530 (1½) ADVANCED COMPILER CONSTRUCTION**

This course presents an in depth study of recent developments in the theory and practice of compiler construction. The major topics include: program flow analysis; code optimization; attribute grammars, automatic code generation methods, and incremental compilers.

**C SC 532 (1½) LOGIC PROGRAMMING**

This course provides a theoretical basis for research in logic programming. Emphasis is placed on the unifying role of logic programming. Thus connections are made with the fixpoint semantics of programming languages in general, with relational database theory, with theory of computation, with formal grammars, and with the semantics of functional programming languages. The core material on logic covers: clauses and Herbrand models; Horn clauses; general interpretations; semantics of equality; lambda calculus and its logical reconstruction.

**C SC 534 (1½) DATAFLOW COMPUTATION**

This course is concerned with both software and hardware aspects of the dataflow approach to computation. We will examine various machine architectures and the corresponding dataflow languages. Special attention will be given to software engineering issues, and the students will have access to an interpreter for the dataflow language LUCID.

**C SC 536 (1½) ADVANCED PROGRAMMING LANGUAGES**

This course examines the principles underlying modern programming languages. Topics presented include: functional programming, type systems, polymorphism, higher order objects, modularity, and models of concurrency.

**C SC 540 (1½) NUMERICAL ANALYSIS: I**

Numerical Linear algebra. Topics include: Gaussian elimination and its variants; sparse positive definite linear systems; sensitivity of linear systems; condition and stability; orthogonal matrices and least squares; eigenvalues and eigenvectors; the QR algorithm; the singular value decomposition.

**C SC 541 (1½) NUMERICAL ANALYSIS: II**

A student may take this course more than once for credit, so long as the course content differs. The course consists of a thorough discussion of a topic selected from the following areas:

- 541A Approximation theory
- 541B The numerical solution of differential equations
- 541C Numerical quadrature
- 541D Optimization

**C SC 545 (1½) OPERATIONS RESEARCH: I**

This course is primarily concerned with linear programming and its applications. Topics discussed include the following: the simplex method, the revised simplex method, computer implementation of linear programming, duality, dual simplex and primal dual algorithms, parametric analysis and postoptimality analysis.

Applications are selected from: the transportation problem, the assignment problem, blending problems, inventory problems, activity analysis, game theory and network analysis.

**C SC 546 (1½) OPERATIONS RESEARCH: II**

This course provides an introduction to model design using queuing theory and simulation techniques. Topics covered include a brief introduction to queuing theory, basic ideas in simulation, random number generators, sampling, critical event and time slice methods, organization of a simulation study, and basic concepts of simulation programming.

**C SC 550 (1½) COMPUTER COMMUNICATIONS AND NETWORKS: I**

This course introduces concepts in computer communications and networks. Topics include: layered network architecture, packet switching networks, local area networks, protocol design and verification, network security, and applications in distributed computing. (3-3)

**C SC 551 (1½) COMPUTER COMMUNICATIONS AND NETWORKS: II**

Selected topics in computer communications and networks including: origins of computer networking, connection-based and connectionless communication, the Internet, layers above the transport level, recent



developments in communications including the impact of new media and related protocols. The course emphasizes the evolution of communications concepts from first inception to present form and considers future directions for research and development in communications.

### C SC 552 (1½) ADVANCED SWITCHING THEORY

This course covers a selection of topics in switching theory and their application to the design of digital systems. The emphasis is on techniques suited to computer aided design (CAD). Topics to be covered are selected from: formal aspects of switching theory; spectral logic; combinational and sequential circuit synthesis; algorithmic state machines; and the software aspects of hardware design such as hardware description languages.

### C SC 554 (1½) FAULT TOLERANT COMPUTING

In this course, issues of fault tolerant computing are discussed, ranging from the choice of fault tolerant architectures, to expert systems for the design and test of integrated circuits. Topics include: design and test of defect free integrated circuits, fault modelling, built in self test, data compression, error correcting codes, simulation software/hardware, fault tolerant system design, CAD tools for design for testability.

### C SC 556 (1½) VLSI DESIGN ALGORITHMS

This course covers algorithmic aspects of the design and application of VLSI circuits and systems. Topics to be covered are selected from: the fundamental components of CAD tools for VLSI design progressing from simple geometric layout packages through to silicon compilation; languages for the description of VLSI systems; simulation at the circuit, switch, functional and behavioural levels; VLSI architectural issues including systolic arrays. Fundamental design principles of VLSI systems are covered.

### C SC 558 (1½) MULTIPLE VALUED LOGIC AND SWITCHING THEORY

This course gives an introduction to the area of multiple valued logic as an alternative to conventional binary logic. Topics will include: representation of multiple valued functions; simplification and minimization techniques; synthesis and design of multiple valued circuits; multiple valued arithmetic units; multiple valued simulation.

### C SC 560 (1½) DESIGN AND ANALYSIS OF REAL-TIME SYSTEMS

Fundamental issues in the design of real-time operating systems and application software. Typical topics include: hard real-time scheduling, interrupt driven systems, process communication and synchronization, language requirements for real-time systems, decomposition of real-time requirements into process model, and case studies. A project involving design, implementation and testing of a real-time executive and real-time application software will also be included. (May not be taken by students with credit in 460) (3-3)

### C SC 562 (1½) DISTRIBUTED COMPUTING

This course deals with recent developments and advanced research topics in the area of distributed computing. Topics include: distributed operating systems, interprocess communications, remote procedure calls, network transparency, file server, execution location, and failure transparency, fault tolerant distributed systems, process replication, load balancing, task migration and performance issues, interconnection strategies, network configurations, problem decomposition, distributed updating of multiple copies, global object addressing, centralized and decentralized control mechanisms, reliability and the reconnection problem, and finally case studies of some of the more significant distributed systems.

### C SC 566 (1½) ADVANCED SOFTWARE ENGINEERING

The goal of Software Engineering is the construction of complex, maintainable software at reasonable cost. This course provides the

opportunity to gain software engineering experience in a controlled environment. Methods for software specification and design are emphasized. Additional topics may include design for change, configuration management, and software tools.

### C SC 568 (1½) MODULARIZATION, DATA ABSTRACTION, AND REUSABILITY

In this course the realizations of the concepts of modularization, data abstraction, and reusability are explored in imperative (Modula-2 and Ada) and object oriented (Smalltalk-80 and ML) programming languages. In particular, the focus is on the topics of type systems and polymorphism. A study of the influence of those concepts of the design of software development environments (Rigi and Cedar) is given.

### C SC 580 (1½) TOPICS IN APPLICATIONS OF COMPUTER SCIENCE

(May be taken for credit more than once, so long as the course content differs)

### C SC 581 (1½) TOPICS IN ARTIFICIAL INTELLIGENCE

(May be taken for credit more than once, so long as the course content differs)

### C SC 582 (1½) TOPICS IN THEORETICAL COMPUTER SCIENCE

(May be taken for credit more than once, so long as the course content differs)

### C SC 583 (1½) TOPICS IN PROGRAMMING LANGUAGES

(May be taken for credit more than once, so long as the course content differs)

### C SC 584 (1½) TOPICS IN NUMERICAL ANALYSIS AND OPERATIONS RESEARCH

(May be taken for credit more than once, so long as the course content differs)

### C SC 585 (1½) TOPICS IN HARDWARE AND COMPUTER ARCHITECTURE

(May be taken for credit more than once, so long as the course content differs)

### C SC 586 (1½) TOPICS IN COMPUTER SYSTEMS AND SOFTWARE

(May be taken for credit more than once, so long as the course content differs)

### C SC 587 (1½) TOPICS IN INFORMATION SYSTEMS

(May be taken for credit more than once, so long as the course content differs)

### C SC 589 (1½) GENERAL TOPICS IN COMPUTER SCIENCE

(May be taken for credit more than once, so long as the course content differs)

### C SC 591 (1½) DIRECTED STUDIES

Individual studies under the direct supervision of a faculty member. The content and evaluation must be approved by the department. (May be taken more than once, so long as course content differs)

C SC 595 (1½) SEMINAR (Grading: INP, COM, N or F)

C SC 598 (3) MASTER'S PROJECT (Grading: INP, COM, N or F)

C SC 599 (6) MASTER'S THESIS (Grading: INP, COM, N or F)

C SC 699 (33) PH.D. DISSERTATION (Grading: INP, COM, N or F)

## EARTH AND OCEAN SCIENCES

### Program

The School of Earth and Ocean Sciences offers a graduate program leading to the degree of Master of Science (M.Sc.) and to the degree of Doctor of Philosophy (Ph.D.) in earth and ocean sciences. Research

areas include a strong focus on earth system science with special studies in paleobiology, sedimentology and stratigraphy, marine geology and geophysics, paleoceanography, geochemistry, biogeochemical cycles, mineral deposit modelling, seismology, biological oceanography,



physical oceanography, geophysical fluid dynamics, ocean mixing, ocean acoustics, air-sea interaction, and climate change.

Applicants for a graduate degree in earth and ocean science should normally have a major or honours degree in this or a closely related science. A student who does not have such a degree can be admitted to the program but may be required to complete additional makeup courses. In doing so, the student must obtain a grade of at least B (5.00) in each such makeup course, and an average of B+ (6.00) in the makeup courses. Mature students are advised to consult the Faculty regulations regarding conditional admittance. The spectrum of research in the School is broad and will be attractive to students from many areas of the basic and applied sciences; cross-disciplinary research involving faculty and facilities in other departments is encouraged. As an integral part of their program, students are normally required to undertake teaching or research assistantships or equivalent duties within the School.

The Master's Program consists of a minimum of 15 units, normally with not less than 6 units of graduate course work and a Master's thesis (EOS 599) typically worth 9 units. The Ph.D. program usually requires a minimum of 9 course units beyond the B.Sc. and a Ph.D. dissertation (EOS 699) typically worth 36 units. The program of study for each student is determined by the Supervisory Committee in consultation with the student. The Supervisory Committee may decide that additional course work is required. The program may also include senior undergraduate courses after assessment of the background strengths and deficiencies of the student.

Within two years of registration and at least six months before the final oral examination, a Ph.D. student must submit a written dissertation research proposal, defining the research topic, the goals of the research and the methodology to be used. This thesis proposal will be defended in an oral candidacy exam. The examining committee will question the candidate to determine that the candidate has the appropriate background knowledge and skills to undertake the proposed project, and that the project is likely to lead to results suitable for a Ph.D. dissertation. Both M.Sc. and Ph.D. students will be required to defend their completed thesis in a final oral examination open to the public.

Inquiries concerning the graduate program may be addressed to the Graduate Studies Advisor, School of Earth and Ocean Sciences. Application forms for admission, which include the indication of need for financial assistance, can be obtained directly from the Faculty of Graduate Studies. Applicants whose native language is not English should write the TOEFL (Test of English as a Foreign Language) and submit the scores to the Faculty of Graduate Studies (see page 288 for Faculty requirements) together with their application forms. Even with passing TOEFL scores, students may be required to take English language courses as well as their other course work.

#### Facilities

The School offers its graduate students a range of equipment for study and research, and arranges access to some of the equipment in nearby government laboratories. Students have access to the University's main-frame computer and work stations and to the 16.4 metre marine science service vessel JOHN STRICKLAND.

#### Faculty and Fields of Research

Christopher R. Barnes, B.Sc., Ph.D. (Ottawa), F.R.S.C., Professor, Director of the School and Director of the Centre for Earth and Ocean Research (CEOR)

J. Vaughn Barrie, Ph.D. (Wales), Adjunct Associate Professor

James Bishop, Sc.D. (M.I.T.), Professor

Dante Canil, Ph.D. (Alberta)

Eddy C. Carmack, Ph.D. (Washington), Adjunct Professor

Paleozoic paleontology, stratigraphy, paleoecology; biological and chemical events in ancient oceans; conodont paleobiology.

Marine geology; shelf sedimentation processes; placer deposits.

Physical, biological and chemical controls on the cycles of inorganic and organic chemical species in the ocean

Experimental and igneous petrology; petrogenesis of mantle-derived rocks

Circulation and mixing in polar seas and influence on biological processes; physical limnology.

N. Ross Chapman, Ph.D. (British Columbia), Adjunct Professor (Defence Research Establishment Pacific)

Kenneth L. Denman, Ph.D. (British Columbia), Adjunct Professor

Harry W. Dosso, Ph.D. (British Columbia), Professor (Physics)

Howard J. Freeland, Ph.D. (Dalhousie), Adjunct Professor

Inez Fung, Sc.D. (M.I.T.), Professor

Christopher J.R. Garrett, Ph.D. (Cambridge), F.R.S., F.R.S.C., Lansdowne Professor

Kathryn M. Gillis, Ph.D. (Dalhousie)

John R. Harper, Ph.D. (Louisiana State), Adjunct Associate Professor

Richard J. Hebda, Ph.D. (British Columbia), Adjunct Associate Professor

Louis A. Hobson, Ph.D. (Washington), Associate Professor (Biology)

Greg Holloway, Ph.D. (Scripps), Adjunct Associate Professor

Roy D. Hyndman, Ph.D. (A.N.U.), F.R.S.C., Adjunct Professor (Pacific Geoscience Centre)

Edward Irving, Sc.D. (Cantab.) F.R.S., F.R.S.C. Adjunct Professor (Pacific Geoscience Centre)

Rolf Ludvigsen, Ph.D. (Western Ontario), Adjunct Professor

Rolf G. Lueck, Ph.D. (British Columbia), Adjunct Professor

Ocean acoustics, acoustic signal processing, ambient noise, marine seismology, seismic inversion methods.

Biological/physical oceanographic interactions; ocean biogeochemical fluxes and climate change.

Geomagnetism: laboratory analogue and numerical modelling of electromagnetic induction in the earth and oceans.

Ocean circulation; coastal dynamics and fjord oceanography.

Geophysical fluid dynamics; climate dynamics and large scale numerical modelling; biogeochemical cycles; remote sensing; atmosphere/ocean/biosphere interactions

Physical oceanography, geophysical fluid dynamics and ocean mixing processes.

Marine geology; fluid-rock interaction in oceanic hydrothermal systems; formation of the oceanic crust; metamorphic petrology

Coastal and nearshore marine geology; oil spill effects; long-term environmental monitoring.

Quaternary stratigraphy, vegetation and climate change; Holocene palynology to decode diet, medicine and agriculture of native peoples.

Phytoplankton biology and primary productivity, particularly in the North Pacific and fjords.

Theory and modelling of ocean/climate interaction, turbulence, mixing and topographic influences on circulation.

Geophysics, marine and land; active continental margin tectonics and structure; geothermal studies; seismotectonics; magnetotellurics; physical properties of rocks.

Paleomagnetism; global tectonics, tectonics of Cordilleran terranes and extension zones; magnetic overprinting as a tracer of ancient fluid flow; magnetostratigraphy; continental reconstructions; paleobiogeography.

Biostratigraphy; evolution and paleontology of Lower Paleozoic trilobites; paleontology of Mesozoic crustaceans.

Physical oceanography; direct measurement of oceanic microstructure, turbulence and mixing processes; instrumentation.



David L. Mackas, Ph.D. (Dalhousie), Adjunct Associate Professor (Institute of Ocean Sciences)

Garry C. Rogers, Ph.D. (British Columbia), Adjunct Associate Professor (Pacific Geoscience Centre)

George D. Spence, Ph.D. (British Columbia), Assistant Professor and University Research Fellow

Robert W. Stewart, Ph.D. (Cantab.), F.R.S., F.R.S.C., Adjunct Professor

David F. Strong, Ph.D. (Edinburgh), F.R.S.C., Professor and President of the University

Verena Tunnicliffe, Ph.D. (Yale), F.R.S.C., Associate Professor

Eileen Van der Flier-Keller, Ph.D. (Western Ontario), Associate Professor

Andrew J. Weaver, Ph.D. (British Columbia), Assistant Professor

John T. Weaver, Ph.D. (Saskatchewan), Professor

Michael Whiticar, Ph.D. (Christian Albrechts), Associate Professor

C.S. Wong, Ph.D. (Scripps), Adjunct Professor

Christopher J. Yorath, Ph.D. (Queen's), Adjunct Professor

Spatial pattern in pelagic ecosystems, zooplankton feeding and swimming behaviour, interaction of physical and biological processes in the ocean, statistical analysis of plankton community pattern.

Earthquake seismology and related tectonic processes, earth structure using earthquake generated waves, earthquake hazard.

Refraction and reflection seismology, marine and land-based; geophysics and tectonics of western Canadian margin and Cordillera.

Physical oceanography, ocean circulation, ocean turbulence, air-sea interaction, sea-level change.

Mineral deposits, igneous petrology, and geochemistry; modelling of mineral deposits in space and time.

Evolution of marine communities: hydrothermal vents, seamounts and fjords; interaction with physical and geological processes.

Geochemistry; coal geology — tectonic setting, depositional environment, mineralogy, geochemistry, specialized element potential; marine sediments — transform faults, hydrothermal activity.

Roles of oceans in climate change and variability; eastern boundary currents; Labrador Sea circulation.

Geomagnetism; numerical modelling and inversion of electromagnetic induction in the earth and oceans.

Organic geochemistry, especially diagenesis of marine sediments and petroleum geology; gas hydrates; biogeochemical cycles; greenhouse gases.

Chemical oceanography, particularly the role of the carbon cycle in global climate change; pathways of ocean pollutants, especially metals and hydrocarbons.

Geology and geophysics of Pacific continental margin, especially tectonic and thermal history; petroleum resources.

## EOS 500 (1½) MARINE ORGANIC GEOCHEMISTRY

This course tracks the fate of marine organic matter from its formation through its transformation and destruction during depositional, diagenetic (remineralization) and catagenic (petroleum generation) processes. The concepts and analytical techniques of water and interstitial fluid chemistry, geochemical biomarkers, stable isotope geochemistry and petroleum source rock geochemistry are examined.

## EOS 501 (1½) GEOCHEMISTRY OF CARBONACEOUS DEPOSITS

A lecture and seminar course examining the geochemical characteristics of fossil fuels. Discussion of geological controls on major and trace element and isotopic signatures of coal, oil, carbonaceous shales, and environmental implications of use.

## EOS 503 (1½) GLOBAL BIOGEOCHEMICAL CYCLES

This course tracks the fate of organic matter from its formation (primary production) through its transformation and destruction during transport, depositional, and diagenetic remineralization processes. Global carbon, nitrogen, phosphorous, and sulphur cycles are discussed. Emphasis is placed on describing the fluxes of nutrients and other major compounds within soils, and the sedimentary and water columns, and across their interface.

## EOS 504 (1½ or 3) SELECTED TOPICS IN GEOCHEMISTRY

This course may repeat with a different content (offered as 504A, 504B, 504C and 504D). Topics will be selected in or will span the fields of solid earth, marine, atmospheric and planetary geochemistry. Examples include ocean biogeochemical processes, applications of geochemical tracers in oceanography and climate, principles of isotope geochemistry, hydrosphere-lithosphere reactions, and mantle-lithosphere exchange processes.

## EOS 505 (1½) GENESIS OF MINERAL DEPOSITS

A seminar course dealing with the genetic models for metallic mineral deposits. Emphasis will be placed on those deposits associated with oceanic spreading centres and orogenic belts, with particular examples from the Cordillera and Appalachian-Caledonide belts and analysis of the tectonic, chemical and hydrogeologic controls.

## EOS 506 (1½) GLOBAL BIOEVENTS AND THE PALEOBIOLOGICAL RECORD

Analysis of major global bioevents in the Phanerozoic paleobiologic record; causes and consequences of extinction bioevents; patterns of adaptive radiation; changes to the planetary biota in relation to continental drift, ocean chemistry and circulation, climate change, and bolide impacts.

## EOS 507 (1½ or 3) SELECTED TOPICS IN PALEOBIOLOGY

Selected topics in paleobiology will be considered in depth. The course may be repeated with different content (offered as EOS 507A, 507B, 507C, 507D).

## EOS 508 (1½) MARINE GEOLOGY

A seminar course covering modern processes of marine geology, including depositional processes and diagenesis of marine sediments. The course will examine a range of depositional environments: fjord and coastal, shelf, slope, and oceanic; with consideration of the data obtained from DSDP and ODP drilling.

## EOS 510 (1½) PLATE TECTONICS: THE GEOLOGICAL RECORD

An examination of the processes of plate tectonics as revealed by the geological record, including Precambrian evolution of cratons; rifts and passive margins; convergent margins and orogens; plate motions through time.

## EOS 511 (1½) PLATE TECTONIC PROCESSES

An overview of plate tectonic regimes with emphasis on physical processes and geophysical aspects related to the evolution of the earth's plate system. The course will be organized primarily as seminars and discussions, supplemented by special lectures by faculty and adjuncts.

## GRADUATE COURSES

Graduate students will have the freedom to take courses from departments other than the School of Earth and Ocean Sciences. Courses offered by the departments of Biology, Chemistry, Computer Science, Electrical and Computing Engineering, Geography, Mathematics and Statistics, Mechanical Engineering, and Physics and Astronomy are likely to be particularly relevant. Permission of the Director and Instructor is a prerequisite for all graduate courses offered by the School. Some courses may require specific undergraduate credit for background preparation. Student academic records will be reviewed on an individual basis at the time of admission.



**EOS 512 (1½) EARTH SYSTEM EVOLUTION**

A seminar course that will meet to examine and discuss critically a selection of the most significant research publications of the past six months. The thematic thread will be secular change in regional and global scale terrestrial systems involving the earth, ocean, biota, atmosphere, and solar system. Change on geological time-scales will be emphasized, as revealed by geological, geochemical, geobiological and geophysical evidence. Background information and concepts will be provided by the instructor, but all those taking the course should be prepared to participate actively in discussing the publications. (*Prerequisites* are EOS 410, 460, or their equivalents)

Courses EOS 516A, 516B, 519A, 519B, 520A and 520B are those previously listed by the Department of Physics and Astronomy, and now cross-listed by, or offered by, the School of Earth and Ocean Sciences.

**EOS 516A (1½) (formerly PHYS 516A) ACOUSTICS I****EOS 516B (1½) (formerly PHYS 516B) ACOUSTICS II****EOS 519A (1½) (PHYS 519A) SELECTED TOPICS IN GEOPHYSICS I****EOS 519B (1½) (PHYS 519B) SELECTED TOPICS IN GEOPHYSICS II****EOS 520 (1½) (formerly EOS 520A) GEOPHYSICAL FLUID DYNAMICS**

This course will examine fluid motions in the atmosphere and ocean for which the earth's rotation cannot be ignored. Emphasis will be placed on flow instabilities, and their manifestation in the atmosphere and ocean. Topics will include general criteria for instability, shear instabilities, the Eady and Charney problems, convective instabilities, instabilities of the coupled atmosphere-ocean system, as well as the Lorenz problem.

**EOS 521 (1½) THE THEORY OF ELECTROMAGNETIC INDUCTION IN THE EARTH**

This course provides an introduction to the basic theory and methods of geoelectromagnetic induction. Topics covered include the basic equation of induction; induction in one-dimensional spherical and flat earth models; response functions; the magnetotelluric and magnetovariational methods; one-dimensional inversion of magnetotelluric data; equations of induction in two dimensions; impedance tensor.

**EOS 522 (1½) SELECTED TOPICS IN GEO-ELECTROMAGNETIC INDUCTION**

This course will develop special areas of geo-electromagnetic induction according to the students' interests. Examples of advanced topics which may be covered are: analytical and numerical modelling of two-dimensional induction phenomena; scaling equations and methods of laboratory modelling; three-dimensional forward modelling on the computer; topics in inversion theory; decomposition of the impedance tensor.

**EOS 523 (1½) SEISMOLOGY**

Theoretical and practical aspects of seismic wave propagation, earthquake seismology, and processing and interpretation of reflection and refraction data.

**EOS 524 (1½) CRUSTAL GEOPHYSICS**

Primarily a seminar course focussing on geophysical properties and processes in the continental crust. Detailed consideration will be given to the deep seismic data generated by the LITHOPROBE, COCORP and COCRUST projects.

**EOS 530 (1½) WAVES IN THE OCEAN**

The physics and mathematical theories of surface gravity waves, internal waves, Rossby waves and other wave motions in the ocean are introduced, with an emphasis on general results that describe the effects on the waves of variable properties of the medium, and the back effects of the waves on the mean flow.

**EOS 531 (1½) PHYSICAL OCEANOGRAPHY**

Physical properties of sea water, equation of state, gravitational stability, large-scale ocean currents, meridional distribution of salinity and temperature, surface heat budgets, water masses, estuary flows.

**EOS 532 (1½) DYNAMICAL OCEANOGRAPHY**

The circulation of the ocean in response to forcing by wind stress and buoyancy input on a variety of space and time scales is examined. Topics include western intensification (why there is a Gulf Stream), equatorial dynamics and circulation on the continental shelf.

**EOS 533 (1½) OCEANIC BOUNDARY LAYERS**

The ocean communicates with the atmosphere and solid earth through its boundary layers at the sea surface and ocean floor. The physics of these layers is analyzed with a view to understanding the exchange of momentum, heat and gases. Topics include classical turbulent layer theory and the effects of coherent structures such as Langmuir circulation. The roles of buoyancy flux and sea-floor slope are also examined.

**EOS 534 (1½) OCEAN MIXING PROCESSES**

The distribution of properties in the ocean and ocean circulation are greatly influenced by small scale processes that cannot be explicitly included in numerical models of the ocean. The physics and parameterization of processes such as breaking internal waves, double diffusion and boundary mixing are analyzed, with discussion of observational techniques as well as theories.

**EOS 535 (1½) EXPERIMENTAL TECHNIQUES IN PHYSICAL OCEANOGRAPHY**

Advances in our understanding of the ocean stem from precise observations in a frequently remote and hostile environment. Techniques for measuring ocean currents and other oceanic properties on scales from millimetres to megametres are reviewed, including a discussion of remote sensing techniques using satellites or ocean acoustics.

**EOS 536 (1½) SATELLITE OCEANOGRAPHY**

The global coverage afforded by remote sensing from space is vital for many problems of oceanography and climate. This course discusses relevant orbital properties, radiative transfer theory, active and passive techniques, and the algorithms used to obtain sea surface temperature, height, roughness and colour as well as lower atmosphere wind speed, humidity and rainfall.

**EOS 544 (1½ or 3) SELECTED TOPICS IN OCEANOGRAPHY**

Selected topics in oceanography will be covered in depth. The course may be repeated with different content (offered as 544A, 544B, 544C, 544D).

**EOS 550 (1½) THE OCEAN-ATMOSPHERE SYSTEM**

Studies of the earth's climate require an understanding of the intimate links between the ocean and atmosphere. Basic theories of the circulation of each are discussed and the physics of coupled models examined, with emphasis on simple intuition-building mathematical models as well as discussion of large computer models.

**EOS 551 (1½) GENERAL CIRCULATION OF THE ATMOSPHERE**

Discussions on the general circulation of the atmosphere. Following a historical introduction, various topics to be discussed will be the chaotic and statistical nature of climate; climate definition and theories; mass, angular momentum, moisture and energy budgets; variability; El-Nino/Southern Oscillation (ENSO); modelling the climate system; climate prediction and validation; climate change.

**EOS 552 (1½) NUMERICAL METHODS IN ATMOSPHERIC AND OCEANIC MODELLING**

Description of numerical models used to investigate the general circulation of the atmosphere and ocean. Specific topics to be discussed include finite differencing techniques; finite difference approximations; computational instability, accuracy and efficiency; Galerkin spectral and finite element techniques; numerical methods based on the primitive equations; special numerical considerations in the parameterization of physical processes.



**EOS 553 (1½) CARBON CYCLE DYNAMICS**

Studies of climate change require an understanding of the processes that maintain and alter the abundance of carbon dioxide in the atmosphere. Observations and theories about the global carbon cycle will be reviewed. Emphasis will be placed on understanding the processes that exchange carbon dioxide among the atmosphere-ocean-terrestrial system on season to millennial time scales. Techniques and data for developing and evaluating models are outlined, and existing models that attempt to explain the variations are examined to highlight their strengths and limitations.

**EOS 554 (formerly EOS 520b) (1½) ATMOSPHERIC DYNAMICS**

This course will examine theories explaining the large-scale dynamics of the atmosphere with an emphasis on those describing wave mean-flow interactions. Specific topics will include barotropic and baroclinic Rossby waves; wave propagation; the non-acceleration and Eliassen-Palm theorems.

**EOS 560 (1½) TIME SERIES ANALYSIS**

Many data sets in the ocean and earth sciences arise from continuous sampling in either space or time. Analysis techniques are based on spectral (Fourier) decomposition, starting with univariate analysis and progressing to concepts such as frequency-domain empirical orthogonal functions. Techniques of statistical prediction are also outlined.

**EOS 561 (1½) STATISTICAL THEORY AND METHODS FOR THE ATMOSPHERE**

Progress in understanding the physical mechanisms of the atmosphere and ocean and their large scale interaction, and in forecasting these

systems, relies heavily upon statistical methods for spatially and temporally dependent data. Optimal interpolation methods are used to estimate the current state of these systems from irregular observing networks. Pattern analysis methods, such as empirical orthogonal function (EOF) analysis, are used to understand the spatial structure of atmospheric and oceanic variations. The acquired knowledge can be tested by making and verifying statistical forecasts and hindcasts of these systems.

**EOS 570 (0) SEMINAR**

Participation in a program of seminars by internal and external speakers designed to provide discussion to topics beyond those covered in courses taken for credit. (Grading: COM)

**EOS 580 (1 to 3) DIRECTED STUDIES**

A course designed to enable students to pursue individual interests. (May be taken more than once for credit).

**EOS 599 (credit to be determined, but normally 9 units) M.Sc. THESIS**

The thesis or dissertation requirement for advanced degrees (599 or 699) applies to all students in the School. (Grading: INP, COM, N or F)

**EOS 699 (credit to be determined) Ph.D DISSERTATION**

The thesis or dissertation requirement for advanced degrees (599 or 699) applies to all students in the School. (Grading: INP, COM, N or F)

## ECONOMICS

The Department of Economics offers courses of study in applied economics leading to the degree of Master of Arts. The program is designed to provide students with the analytical expertise and practical knowledge to excel in positions in research and analysis in the private and public sectors of the economy. Areas of concentration are available in: Regional Economics, Urban Economics, Methodology of Applied Economics, International Trade, Economic Development, Public Finance, Economic History, Human Resources (including Labour Economics, Health Economics, Education Economics, the Economics of Crime), Natural Resource and Environmental Economics, Econometrics, Applied Mathematics in Economics, Monetary Policy, Industrial Organization and Public Policy, and other areas which may be arranged in consultation with the Department.

**Admission**

An undergraduate degree in Economics or its equivalent, with at least a B average in the last two years leading to the degree, is required for admission. Applicants must have mastered basic techniques of mathematics and statistics and have demonstrated competence in economic theory and applied areas. Students with insufficient background in economics will normally be required to complete a "qualifying year" prior to admission to the M.A. program. All students normally enroll in Economics 504A and B, Mathematical and Statistical Methods for Economists. (504A and B are offered during Registration Week and during the first week of fall classes.) The Faculty of Graduate Studies and/or the Graduate Adviser may require any student to complete the Graduate Record Exams (G.R.E.), including the aptitude and subject area tests; students whose native language is not English must comply with Faculty of Graduate Studies requirements for competency in English (i.e., TOEFL may be required).

**Programs**

The Department offers two programs leading to the M.A. degree in Economics: (A) thesis option, and (B) non-thesis option. Both programs require a minimum of 15 units.

**A. Thesis Option:**

1. Successful completion of the core program (4½ units), consisting of 500, 501, 504A, 504B, 545.
2. Successful completion of an additional 6 units of courses subject to the approval of the student's Supervisory Committee. Courses are

normally chosen from the graduate course offerings of the Department, but, with the permission of the Department, may include up to three units of courses numbered at the 400 level as well as graduate courses in other departments. Directed Studies (595) provides the means of pursuing subject areas that are not covered in the listed courses. Students are encouraged to apply to individual instructors for Directed Studies. Students interested in the Cooperative Option (see below) must include ECON 516 in their program.

3. Successful completion of a formal thesis prospectus.
4. Successful completion of a Master's thesis (599). The thesis is awarded 4½ units.

**B. Non-Thesis Option:**

Core courses requirement as for Thesis Option.

Successful completion of an additional 7½ units of courses subject to the approval of the student's Supervisory Committee. Courses are normally chosen from the graduate course offerings of the Department, but, with the permission of the Department, may include up to three units of courses numbered at the 400 level as well as graduate courses in other departments. Courses that are not listed can be offered through Directed Studies (595) courses (students are encouraged to apply to individual instructors for Directed Studies). Students interested in the Cooperative Option (see below) must include ECON 516 in their program.

Successful completion of an Extended Essay (598). This extended essay is awarded three units.

**Cooperative Option**

The cooperative education option extends the regular program to include at least eight months of work in government or industry. The option provides a unique opportunity not only to 'learn and earn' but also to gain practical experience in applied economics. The work periods are an integral part of the student's program. Research undertaken during the work period may be used to provide the basis for the student's thesis or essay. Students must take ECON 516 prior to their first work period.

**Faculty and Major Areas of Research**

|                                    |   |
|------------------------------------|---|
| Kenneth L. Avio, Ph.D.<br>(Purdue) | Economics of crime, law and economics, Microeconomics |
|------------------------------------|---|



Robert L. Bish, Ph.D.  
(Indiana)

James Cutt, Ph.D.  
(Toronto)

A.R. Dobell, Ph.D.  
(M.I.T.)

Donald G. Ferguson, Ph.D.  
(Toronto)

David E. Giles, Ph.D.  
(Canterbury)

Judith A. Giles, Ph.D.  
(Canterbury)

Ralph W. Huenemann, Ph.D.  
(Harvard)

J. Colin H. Jones, Ph.D.  
(Queen's)

Peter W. Kennedy, Ph.D.  
(Queen's)

Ian P. King, Ph.D.  
(Queen's)

James J. McRae, Ph.D.  
(Western Ontario)

Carl A. Mosk, Ph.D.  
(Harvard)

Serge Nadeau, Ph.D.  
(Carnegie-Mellon)

David B. Nickerson, Ph.D.  
(Northwestern)

Michèle Pujol, Ph.D.  
(Simon Fraser)

Malcolm Rutherford, Ph.D.  
(Durham)

Joseph Schaafsma, Ph.D.  
(Toronto)

John A. Schofield, Ph.D.  
(Simon Fraser)

Nancy M. South, Ph.D.  
(Toronto)

Kenneth G. Stewart, Ph.D.  
(Michigan)

William D. Walsh, Ph.D.  
(Yale)

Gerald R. Walter, Ph.D.  
(California)

Linda A. Welling, Ph.D.  
(Western)

Anming Zhang, Ph.D.  
(British Columbia)

Public choice theory, subnational government organization, coastal resources management

Public finance, human resources policy, economic development and planning

Formation and evaluation of public policy, policy analysis

International trade, mathematical economics

Applied and theoretical econometrics

Econometric theory, applied time series analysis

Chinese economy; project evaluation

Industrial organization, microeconomic theory

Microeconomic theory, industrial organization, environmental economics

Macroeconomics, public finance, labour economics

Microeconomics, international trade, regional economics, transportation economics

Japanese economic development, population economics

Taxation theory and policy, applied public policy, applied econometrics

Macroeconomics, monetary theory

Feminist economic theory, women in the labour force, equity policies

History of economic thought, methodology, institutional economics

Public finance, health economics

*Regional economics, cost/benefit analysis*

Economic history, labour economics

Econometrics, monetary theory

Labour economics

Urban economics, natural resources, regional economics

Industrial organization, microeconomic theory, intergovernmental tax competition

Industrial organization, airline economics

## ECON 501 (1½) MACROECONOMICS

Review of static Keynesian and classical models in both closed and open economies. Review of dynamic optimization techniques. Consumption and investment decisions over time. Dynamic general equilibrium models. Monetary models, multiple equilibria, bubbles and stability. Long-run growth. Government policy.

## ECON 502 (1½) HISTORY AND METHOD OF ECONOMICS

Seminar in selected issues in the history and methodology of economics. Topics may range over the work of particular authors or schools, the problems of theory selection, and the philosophy of science as applied to economics.

## ECON 504A (formerly half of 504) (0) MATHEMATICAL METHODS FOR ECONOMISTS

A survey of the mathematical methods most frequently used in economics. The topics covered include: the calculus of functions of several variables, the properties of homogeneous functions, the implicit function theorem, matrices, systems of equations, constrained and unconstrained optimization, the envelope theorem, the general method of comparative statics.

(Grading: INC, COM, N or F)

## ECON 504B (formerly half of 504) (0) STATISTICAL METHODS FOR ECONOMISTS

A survey of the statistical techniques most frequently used in economics. Topics covered include probability theory, sampling theory, confidence intervals, hypothesis testing, regression and correlation.

(Grading: INC, COM, N or F)

## ECON 505A (formerly half of 505) (1½) THE THEORY OF INTERNATIONAL TRADE

A study of international production and exchange. The topics covered include: the nature and source of the gains from trade; the determinants of international production and comparative advantage; international factor mobility and transnational production; the implications of market imperfections; trade and growth. Particular attention is given to the generality of theoretical propositions and their empirical applications. (Prerequisite: 500 or 405A or equivalent)

## ECON 505B (formerly half of 505) (1½) THEORY OF TRADE POLICY

An examination of selected contributions to the theory of tariffs and other trade restrictions, and an analysis of trade policy for the developed and developing countries. (Prerequisite: 500 or 405A or equivalent)

## ECON 506 (1½) MONETARY THEORY AND POLICY

The examination of selected contributions to contemporary monetary theory and policy, and their relationship to macroeconomics. Topics may include the introduction of monetary elements into macroeconomic models, with emphasis on wealth effects and budget constraints; the theory of the demand and supply of money; interest rate and monetary policy; an introduction to rational expectations and New Classical macroeconomic theory.

## ECON 510 (1½) INDUSTRIAL ORGANIZATION AND PUBLIC POLICY

Seminar in the structure and performance of industrial markets with special emphasis on the problems of maintaining effective competition in Canada.

## ECON 512 (1½) URBAN ECONOMICS

Theory and policy of the urban economy. Topics include the macroeconomics of urban growth, stagnation and decline; the neoclassical theory of the urban economy; the economics of housing, land use, intraurban location and urban environmental quality.

## ECON 513 (1½) REGIONAL ECONOMIC DEVELOPMENT

Selected analytical approaches to regional economic development. Topics include theories of location and growth, techniques of analysis and assessment of policy alternatives.

## GRADUATE COURSES

Students should consult the Department concerning courses offered in a particular year.

### ECON 500 (1½) MICROECONOMICS

Analysis of methods used to derive testable hypotheses concerning the behaviour of consumers, firms, and markets. Discussion of theoretical foundations of concepts widely used in applied economics (e.g., consumer surplus analysis, the behaviour of firms under regulatory constraint, production economics). Readings in selected areas of the applications of microeconomic theory. (Corequisite: 504 or equivalent)



**ECON 515 (1½) LABOUR ECONOMICS**

Seminar in labour economics and collective bargaining, including wage and employment theory, collective bargaining systems, theory of labour movement, and public policy in collective bargaining.

**ECON 516 (1½) COST BENEFIT ANALYSIS**

Theoretical issues in project and program analysis. Selected applications in such areas as human resource economics, natural resource and recreation economics, economic development, subnational planning.

**ECON 517 (1½) THE ECONOMICS OF CANADIAN HEALTH CARE**

Analysis of the structure, function and performance of the medical market with emphasis on physician and hospital services.

**ECON 518 (1½) ECONOMIC ANALYSIS OF LAW AND CRIME**

Intensive investigation of efficiency aspects of accident, property, contract and criminal law; theoretical and empirical analysis of criminal behaviour and of the criminal justice system.

**ECON 521 (1½) ECONOMIC HISTORY**

Seminar in selected topics in economic history including the approach and contributions of "the new economic history", theories of long-run economic growth, history and analysis of long-run economic growth in selected countries, and new work in the literature.

**ECON 522 (1½) ADVANCED TOPICS ON THE JAPANESE ECONOMY**

This course will cover advanced topics in economics relevant to the economic development and contemporary functioning of the Japanese economy. The themes are theories of the Japanese firm, trade, industrial organization, human resources and education, government policy, technological progress and research and development.

**ECON 525 (1½) PUBLIC FINANCE AND FISCAL POLICY**

Seminar in selected topics in fiscal policy and public finance including the incidence and effects of taxation, government expenditure programs and public debt operations.

**ECON 527 (1½) MANAGERIAL ECONOMICS**

The application of economic principles and methodologies to the decision making process within the organization under conditions of certainty and uncertainty. Topics include pricing decisions, product strategy, capital budgeting.

**ECON 529 (1½) ECONOMICS OF FINANCE**

The basic theory of finance under uncertainty. Topics include expected utility maximization, state preference theory, analysis of capital asset pricing, and option pricing.

**ECON 530 (1½) ECONOMICS OF NATURAL RESOURCES**

Seminar in the economics of natural resources including a survey of relevant theoretical literature and selected topics covering problems of resource industries.

**ECON 531 (1½) ENVIRONMENTAL ECONOMICS**

Seminar in selected issues in environmental economics. Topics to be covered may include problems of externalities, liability rules, various models of the interaction between economic and environmental processes, measurement of consumers' surplus in the case of environmental goods and the debate concerning the limits to growth.

**ECON 540A (1½) GAME THEORY IN ECONOMICS**

Game theory, including dynamic games. Applications to the study of strategic interaction between economic agents. Topics include standard oligopoly models, entry deterrence and predation, R and D rivalry.

**ECON 540B (1½) GENERAL EQUILIBRIUM AND WELFARE ECONOMICS**

Selected topics in general equilibrium theory and welfare economics.

**ECON 540C (1½) INFORMATION AND INCENTIVES**

Theory and applications of the principal agent model to moral hazard, adverse selection and signalling problems.

**ECON 540D (1½) BUSINESS CYCLES AND ECONOMIC GROWTH**

Real and monetary models of the business cycle, models of growth and technological change.

**ECON 545 (1½) ECONOMETRICS**

Estimation and hypothesis testing in the classical linear regression model. Linear restrictions; dummy variables; multicollinearity; specification error. Extensions of the classical model to handle heteroskedasticity, serial correlation and simultaneity.

**ECON 546 (1½) ADVANCED TOPICS IN ECONOMETRICS**

Selected topics in econometrics. Topics may include: maximum likelihood estimation and testing; intrinsically nonlinear models; univariate time series analysis.

**ECON 555 (1½) METHODS OF APPLIED ECONOMICS**

An intensive investigation of certain empirical methods widely used in applied economics. Topics will be chosen from the areas of forecasting, simulation, linear and nonlinear programming, input output analysis, data access, survey techniques and other applied methods.

**ECON 595 (1½) DIRECTED STUDIES IN ECONOMICS**

Individual titles will be assigned to each lettered section (A-Z)

**ECON 598 (3) EXTENDED ESSAY** (Grading: INP, COM, N or F)

**ECON 599 (4½) THESIS** (Grading: INP, COM, N or F)

## EDUCATION

**MASTER OF ARTS**

The Faculty of Education offers programs leading to the Master of Arts degree in the following areas:

- Curriculum Studies
- Educational Psychology:
  - Learning and Development
  - Measurement, Evaluation & Computer Applications in Education
  - Counselling Psychology
  - Special Education
- Educational Administration
- Curriculum and Instruction:
  - English Language Arts
  - Mathematics
  - Music
  - Physical Education
  - Science
  - Social Studies
  - Sport and Exercise Studies

These programs require at least 18 units of course work, including thesis, of which no more than six units may be at the 300 or 400 level.

A research based thesis must be written and successfully defended in an oral examination.

In addition to the usual admission requirements of the Faculty of Graduate Studies, individual departments may require relevant professional experience.

**MASTER OF EDUCATION**

The Faculty also offers programs leading to the degree of Master of Education in the following areas:

- Art Education
- Coaching Studies
- Counselling
- Curriculum Studies
- Educational Administration
- Educational Psychology
- English Language Arts
- Mathematics
- Music
- Physical Education
- Science
- Social Studies
- Special Education



The general regulations for this degree are as follows:

- (i) The Master of Education degree will require at least 18 units of course work, of which no more than six units may be at the 300 and 400 level. A comprehensive final examination (written and/or oral) will be required. A Project in research and/or curriculum development may be required as determined by the Faculty of Education.
- (ii) The usual admission requirements of the Faculty of Graduate Studies should be met and, in addition, applicants must have had at least two years of successful relevant professional experience. However, applicants who do not meet the normal admission requirements of the Faculty of Graduate Studies may be granted conditional admission to the M.Ed. program, provided the applicant:
  - (a) holds a recognized bachelor's degree
  - (b) has successful relevant professional experience for a minimum of five years as attested to by at least two supervisors of the applicant's work
  - (c) is recommended for admission by the Faculty of Education and approved by the Admissions Committee of the Faculty of Graduate Studies.

Formal admission to the M.Ed. program for conditionally admitted students will be granted to those who achieve a B (5.00 G.P.A.) average, with no grade less than a B- (4.00 G.P.A.) on the first nine units of work in the program.

### MASTER OF SCIENCE

The School of Physical Education offers a program leading to the degree of Master of Science in Sport and Exercise Studies. This program requires at least 18 units of course work of which no more than six units may be at the 300 or 400 level. At least three of the elective units must be science based. A research based thesis must be written and must be successfully defended in an oral examination. A more detailed description of all Master's degree programs may be obtained from the general office, School of Physical Education.

### DOCTOR OF PHILOSOPHY

The Faculty also offers programs leading to the Ph.D. degree in Educational Psychology and Language Arts.

### ADMISSION DEADLINES

The Faculty of Education will observe the following deadlines for initial applications to all programs:

January 6:

For applicants seeking priority consideration for counselling Master's degree programs.

February 15:

For applicants seeking Scholarships and Fellowships. (In the event of enrollment limitations, preference will be given to applicants meeting this deadline.)

February 28:

For applicants seeking admission to the following Summer Studies.

March 15:

For applicants seeking admission for September in programs in Educational Psychology other than Counselling. (M.A., M.Ed. & Ph.D.)

April 30:

For applicants seeking admission in September to the following Winter Session.

October 15:

For applicants seeking admission in January of the current Winter Session. (Not all departments admit students in January.)

### Faculty and Areas of Research

|   |  |
|---|--|
| Sheilah M. Allen, Ph.D.<br>(British Columbia) | Secondary reading, English education, teacher training                     |
| John O. Anderson, Ph.D.<br>(Alberta)          | Educational measurement and evaluation.                                    |
| Robert J. Anthony, Ph.D.<br>(Toronto)         | Developmental language arts; cross cultural education; applied linguistics |

Daniel G. Bachor, Ph.D.  
(Toronto)

Laurie Rae Baxter, Ph.D.  
(Ohio State)

Frederick I. Bell, Ed.D.  
(North Carolina-Greensboro)

Donald L. Bergland, Ed.D.  
(British Columbia)

Kathie M. Black, Ph.D.  
(Mexico State)

Wanda A. R. Boyer, Ph.D.  
(Southern Mississippi)

I.K. Burbank, Ed.D.  
(Utah State)

Martin L. Collis, Ph.D.  
(Stanford)

Robert C. Dalton, Ph.D.  
(Ohio State)

David deRosenroll, Ph.D.  
(Victoria)

Laurence E. Devlin, Ph.D.  
(Chicago)

David Docherty, Ph.D.  
(Oregon)

Lily Li-Chu Dyson, Ph.D.  
(Washington)

Peter O. Evans, Ph.D.  
(Alberta)

Pierce Farragher, Ph.D.  
(Pennsylvania State)

Thomas G. Fleming, Ph.D.  
(Oregon)

Robert H. Fowler, Ph.D.  
(Duke)

M. Honoré France, Ed.D.  
(Massachusetts)

Leslee G. Francis-Pelton, Ph.D.  
(Brigham Young)

Children with learning problems, instruction for exceptional children

Media and popular culture; arts and cultural policy; and curriculum studies

Teaching effectiveness, motor skill acquisition, elementary school physical education

Aesthetics; social and cultural foundations; creativity in studio productions; video and multimedia production

Secondary and elementary science curriculum and methodology, computer applications in education, school change

Early childhood education, motivation, professional studies, and family development

Methodology in teaching Mathematics, curriculum development in elementary mathematics, measurement of math attitudes

Theory and practice of physical fitness and fitness testing, human response to hypothermia and exercise stress

Middle childhood art, spontaneous drawing and multicultural art education

Peer helping, mentoring, "at-risk" individuals, counsellor education

Adult education, adult learning, program design and delivery, non-traditional study, organizational theory

Motor development and maturation, acquisition of motor skills, curriculum development

Family and sibling development in the context of a child's special needs; child development; integration of children with special needs

The nature and development of language abilities, the development of word meaning, computers in education

Elementary and secondary science methodologies, computer application in science education

Social thought and education, historical study in administration.

Social studies education (secondary), curriculum development and implementation

Multiculturalism, child development, Eastern forms of healing, group dynamics

Secondary mathematics methodologies, measurement and evaluation, computer applications in mathematics education



- Noel Gantly, Ed.D.  
(Brigham Young)
- Catherine A. Gaul, Ph.D.  
(Victoria)
- Sandra L. Gibbons, Ph.D.  
(Oregon)
- Betty Anne Hanley, Ph.D.  
(Minnesota)
- W. John Harker, Ed.D.  
(British Columbia)
- Carol E. Harris, Ed.D.  
(Toronto)
- C. Brian Harvey, Ph.D.  
(Ohio State)
- Geoffrey G. Hett, Ph.D.  
(Oregon)
- Jennifer L. Hill, Ed.D.  
(Northern Colorado)
- Geoffrey S. Hodder, M.A.  
(Victoria)
- Christopher E. Hodgkinson,  
Ed.D. (British Columbia)
- Dawn C. Howard-Rose, Ph.D.  
(Simon Fraser)
- Bruce L. Howe, Ph.D.  
(Oregon)
- Terry D. Johnson, Ed.D.  
(British Columbia)
- Gerald N. King, Ed.D.  
(Brigham Young)
- Donald W. Knowles, Ph.D.  
(Alberta)
- Werner W. Liedtke, Ph.D.  
(Alberta)
- E. Anne Marshall, Ph.D.  
(Toronto)
- Yvonne M. Martin-Newcombe,  
Ph.D. (McGill)
- Margie I. Mayfield, Ph.D.  
(Minnesota)
- Elementary music methodologies, developmental theory, research in music in early childhood and contextualism in teacher education
- Pediatric exercise physiology; children and health-related fitness; special issues for girls and women in sport and exercise
- Elementary and secondary school physical education, affective development, fair play
- Foundations in music education, elementary music methods, choral music, Q methodology.
- Discourse processing from an educational perspective; contemporary literary theory and its implications for teaching English literature at the secondary and post-secondary levels; the semiotic study of educational events.
- Women in leadership; organizational theory, technological rationality and the arts
- Adolescent development, cross-cultural psychology
- Teacher education, behavioural counselling, special education
- Special education, integration of exceptional children, children with visual impairments, post secondary education and students with disabilities
- Art curriculum, aesthetic judgment process
- Educational administration: values and organization, theory, philosophy of administration. Philosophy: values education, policy analysis, organizational analysis
- Cognition and instruction; learning strategies; motivation; adolescent psychology
- Sport psychology, curriculum development, children's play
- Children's literature, psycholinguistic approaches to reading instruction, reading comprehension
- Secondary instrumental/choral music education methodology, curriculum and instruction; conducting; qualitative research
- Developmental psychology, children's imaginative abilities, children's responses to life crises, gifted children
- Elementary mathematics, early childhood education
- Counsellor skill development, career and life planning, school counselling, gender issues
- Educational administration: administrative theory, organization theory. School law
- Early childhood education, early literacy and parent involvement
- Ian McDougall, M.Mus.  
(British Columbia)
- R. Dale McIntosh, Ph.D.  
(Washington)
- Carole S. Miller, M.A.  
(Pittsburgh)
- Walter Muir, Ph.D.  
(Alberta)
- Peter J. Murphy, Ph.D.  
(Alberta)
- Douglas R. Nichols, Ph.D.  
(Oregon)
- Antoinette A. Oberg, Ph.D.  
(Alberta)
- Lloyd O. Ollila, Ph.D.  
(Minnesota)
- Arthur V. Olson, Ed.D.  
(Boston)
- R. Vance Peavy, D.Ed.  
(Oregon)
- Geoffrey D. Potter, Ph.D.  
(Sheffield)
- Alison Preece, Ph.D.  
(Victoria)
- Ted J. Riecken, Ed.D.  
(British Columbia)
- Mary D. Sakari, Ph.D.  
(Alberta)
- Gloria J. Snively, Ed.D.  
(British Columbia)
- Vernon J. Storey, Ed.D.  
(British Columbia)
- Terry L. Sweeting, Ph.D.  
(South Carolina)
- Paul F. Thomas, Ph.D.  
(Toronto)
- Jazz studies in education
- Choral and instrumental music, music history, computers in music education
- Elementary and Secondary Drama/Theatre in Education, arts integration, curriculum development
- Educational measurement, evaluation, computer applications
- Organizational change and development, organizational theory, educational leadership, comparative and international education
- Recreation and leisure for the disabled, outdoor leisure pursuits
- Curriculum theory, critical reflection on practice, interpretive inquiry, especially phenomenology and hermeneutics
- Early learning, developmental and remedial reading
- Reading, development and administration/supervision of the reading program
- Human science and sociodynamic orientations in counselling theory and practice, qualitative and interpretive research methods
- Educational technology
- Language development; language play; early literacy; early childhood education
- School culture and the ethnology of schooling. Educational change and innovation. Applications of computer technologies to social studies education
- Elementary language arts, diagnostic reading, affective education in language arts, literacy materials
- Science education, environment education, marine education, curriculum development.
- Leadership development, politics of education, organizational change.
- Teaching effectiveness in elementary and junior high school education; development of pedagogical knowledge bases in physical education pre-service teachers; effects of environmental design on the acquisition of motor skills
- Geography methods, international development education, adult education, transpersonal and depth psychology, qualitative, phenomenological and action research, metaphoric consciousness in relation to values education, quantitative methods for geography teachers, curriculum studies



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| Beverly A. Timmons, D.Ed.<br>(Oregon)            | Change processes in higher education, teacher education, learning and development   |
| H. David Turkington, Ed.D.<br>(Washington State) | Elementary and secondary school physical education, curriculum development  |
| Max R. Uhlemann, Ph.D.<br>(Colorado State)       | Individual and group counselling, interpersonal skills training, education and research in stress management, ethics in counselling practice  |
| Geraldine H. Van Gyn, Ph.D.<br>(Alberta)         | Cognitive factors in skill learning and performance, dance in education   |
| James H. Vance, Ph.D.<br>(Alberta)               | Mathematics education   |
| W. John C. Walsh, Ph.D.<br>(Simon Fraser)        | Instructional psychology, assessment of student cognition, cognition and motivation; quantitative methods, psychometrics, multivariate techniques; school psychology, assessment of children with learning problems |
| Howard A. Wenger, Ph.D.<br>(Alberta)             | Physiology of sport and fitness   |
| Richard L. Williams, Ph.D.<br>(Washington State) | Elementary science, measurement and evaluation, metric education  |
| Larry D. Yore, Ph.D.<br>(Minnesota)              | Science education, reading in science, attribute-treatment interactions   |
| William M. Zuk, Ph.D.<br>(Oregon)                | Cross cultural, early childhood and art education   |

## GRADUATE COURSES

### (A) ARTS IN EDUCATION

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year; such offerings will depend upon student program needs and the availability of instructors.

Dr. B.A. Hanley, Graduate Adviser

#### ED-A 502 (1½) COMPUTERS IN MUSIC EDUCATION (ADVANCED)

Advanced applications of the use of computers in music education. MIDI-based technology and hands-on experience will be emphasized.

#### ED-A 520 (2) JAZZ ARRANGING

Exposure to and experience with various arranging techniques, and participation in the jazz ensemble.

#### ED-A 521 (2) JAZZ REPERTOIRE ANALYSIS AND REHEARSAL TECHNIQUES

A study of jazz performance techniques and literature, applications to education, and participation in the jazz ensemble.

#### ED-A 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES — MUSIC

Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level.

#### ED-A 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — MUSIC

Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

#### ED-A 550 (3) RESEARCH AND EVALUATION IN MUSIC EDUCATION

Students are introduced to the various research methods used in music education. Evaluation in music education at all levels is included.

#### ED-A 552 (1½) ADVANCED SEMINAR IN MUSIC EDUCATION

Survey of recent literature in the field, identification of current issues, problems of professional development vis-a-vis advanced study in Music Education.

#### ED-A 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA — ART AND MUSIC

Application of relevant theories and models to the design and development of school curricula in a specific area.

558A Art  
558M Music

#### ED-A 590 (credit to be determined) SPECIAL PROBLEMS — ART AND MUSIC

(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course. Pro forma is required for registration.)

#### ED-A 591 (1½ or 3) SELECTED TOPICS IN EDUCATION

(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

#### ED-A 597 (0) COMPREHENSIVE EXAMINATION — ART AND MUSIC

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education (Grading: INP, COM, N or F)

#### ED-A 598 (credit to be determined) PROJECT — ART AND MUSIC

(Grading: INP, COM, N or F)

#### ED-A 599 (credit to be determined) THESIS — ART AND MUSIC

(Grading: INP, COM, N or F)

### (B) COMMUNICATION AND SOCIAL FOUNDATIONS

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year; such offerings will depend upon student program needs and the availability of instructors.

Dr. J. Harker, Language Arts Adviser  
Dr. M. Mayfield, Early Childhood Education Adviser  
Dr. J. Harker, Administration Adviser  
Dr. J. Harker, Curriculum Studies Adviser  
Dr. G. Potter, Educational Technology Adviser  
Dr. T. Fleming, Educational Foundations Adviser

#### ED-B 520 (3) SEMINAR IN PHILOSOPHY OF EDUCATION

An analysis of the theories of leading contemporary thinkers as they relate to basic values, purposes and problems in public education.

#### ED-B 521 (3) EDUCATIONAL CLASSICS

A study in depth of certain selected "great books" that have had significant influence upon educational thought and practice.

#### ED-B 531 (3) CONCEPTS AND THEORY IN ADMINISTRATION

Critical examination of the classical and modern literature of administrative studies within organizational perspectives, with emphasis on administrative philosophy, decision making processes, power and authority, leadership studies, and general systems theory.

#### ED-B 532 (1½ or 3) ADMINISTRATION OF THE EDUCATIONAL PROGRAM

Examination of approaches to, and problems associated with, the implementation, coordination, supervision, and evaluation of the school's instructional programs.



**ED-B 533 (1½ or 3) CRITICAL DETERMINANTS OF ADMINISTRATION**

(May be taken once for credit in each of the areas listed below)

**533A Politics and Governance of Education**

An analysis of the electoral processes in public education, the forces which emanate from and impinge on elected educational officials, the activities of special interest groups, and the resulting implications for appointed administrators.

**533B The Law and Education**

The study of Federal and Provincial statutes, Ministerial regulations, school board policies, and pertinent court decisions as they impinge, legally, upon the role of the educational administrator.

**533C Educational Finance**

An analysis of the funding of public education, with emphasis upon general principles of finance, governmental structures, taxation procedures, resource allocation, and budgetary practices, with a specific focus on the British Columbia scene.

**ED-B 534 (1½ or 3) ORGANIZATIONAL ANALYSIS AND DEVELOPMENT**

A review of strategies for change and development in educational organizations, with special attention to survey research, action research, organizational diagnosis, team building, and overcoming organizational resistance.

**ED-B 535 (1½ or 3) COMPARATIVE ADMINISTRATION**

(May be taken once for credit in each of the areas listed below)

**535A Regional Comparisons**

Comparative studies of educational administration and systems in Canada and selected foreign countries.

**535B Institutional Comparisons**

Selected cross organizational studies in public, military, hospital, and commercial administration.

**ED-B 536 (1½ or 3) PHILOSOPHY OF LEADERSHIP**

An examination of the relevant interaction of philosophy and leadership, with a view to clarifying philosophical concepts and theories and their application to the analysis, by individuals in leadership positions, of their own and others' behaviour.

**ED-B 537 (1½ or 3) TASKS AND PROCESSES OF ADMINISTRATION**

(May be taken once for credit in each of the areas listed below)

**537A Management of Change**

An analysis of the processes associated with planned change in public education, with a view to assisting administrators to facilitate reforms.

**537B Decision Making**

A study of the factors affecting, and processes involved in, effective decision making by educational administrators.

**537C Leadership**

An examination of general leadership theories, leadership styles, and leadership effectiveness models as they apply to educational administrators.

**537D Instructional Supervision**

Through an analysis of literature in leadership, communication, change and activation, as well as through an analysis of classroom observation techniques, the development of rational organizational patterns of supervision for educational administrators.

**537E Personnel Management**

An examination of the personnel function within educational institutions, with emphasis upon effective personnel policies, recruitment and selection, placement, professional development, promotion and performance evaluation.

**537F Policy Making**

An analysis of the nature of policy development and policy execution at provincial and school district levels, and the implications for educational administrators.

**537G The Principalship**

Analysis of the role of the school principal, with emphasis upon legal status, administrative tasks, and managerial performance.

**537H Educational Planning**

A review of the concepts, approaches and actual practice of educational planning of both macro- and micro levels of activity. New features of planning will be examined for improving the design or policies and the operational procedures of educational organizations.

**ED-B 540 (3) RESEARCH IN CURRICULUM AND INSTRUCTION — LANGUAGE AND READING**

Review of the literature; critical analysis of significant research; planning research in curriculum and instruction. (*Prerequisite*: 342, 343 and 349 or equivalent)

**ED-B 541 (3) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — ENGLISH**

Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

**ED-B 542 (3) READING PROCESSES IN THE SCHOOL CURRICULUM**

An intensive examination of the acquisition and the development of reading competence, focusing on the cognitive and linguistic processes. The course will include an analysis of reading research, methods and materials. (*Pre-or corequisite*: 540 or consent of instructor)

**ED-B 543 (3) LANGUAGE PROCESSES IN THE SCHOOL CURRICULUM**

An intensive examination of the processes through which competence in listening, speaking and writing is developed and of the products which result. The course will include an analysis of language research, methods and materials. (*Pre-or corequisite*: 540 or consent of instructor)

**ED-B 544 (3) ADVANCED COURSE IN REMEDIAL READING**

This course focuses on theoretical and practical issues in the causation, diagnosis, and remediation of reading difficulties as these are encountered in the school setting. Seminar discussions will centre on the research literature relevant to reading difficulties; the practical component will involve students in working in a clinical setting with children with reading problems. (*Prerequisite*: 342/343)

**ED-B 545 (1½) THE READING CURRICULUM IN THE SECONDARY SCHOOL: THEORY AND PRACTICE**

This course will focus on issues in the definition, development and function of secondary school developmental, corrective, and remedial reading programs. The course will also consider the role of the reading consultant in program implementation. (*Prerequisite*: 342/343C)

**ED-B 546 (1½) INTERPRETATION AND ANALYSIS OF LANGUAGE ARTS RESEARCH**

A critical review of research methodologies used in the general area of language arts. Consideration of the appropriateness of specific methodologies to research in classroom problems.

**ED-B 547 (3) ISSUES IN ENGLISH EDUCATION IN THE SECONDARY GRADES**

The extensive critical examination of issues in the learning and teaching of English in the secondary grades. (*Pre- or corequisite*: 541 or consent of instructor)

**ED-B 548 (1½) ISSUES IN PROGRAM DEVELOPMENT FOR EARLY CHILDHOOD EDUCATION**

Applications of curriculum theory and practice to early childhood education. The course will include subject areas such as reading and number awareness as well as program evaluation, planning and agents for change.

**ED-B 549 (3) COMPARATIVE EARLY CHILDHOOD EDUCATION**

A synthesis of international approaches to early childhood education emphasizing the comparative evaluation of programs.

**ED-B 550 (1½) SEMINAR: RESEARCH IN EARLY CHILDHOOD EDUCATION**

Analysis, interpretation, and evaluation of selected research in early childhood education through study of its conceptual and methodological bases. (*Prerequisite*: A minimum 1½ units of graduate level early childhood education or permission of Early Childhood Adviser)



**ED-B 551 (1½) THE YOUNG CHILD IN TODAY'S SOCIETY**

An examination of the young child's status, role and future in the context of Canadian society from the integration of the educational, legal, anthropological, developmental, sociological and historical perspectives.

**ED-B 552 (1½) CONTEMPORARY TRENDS IN EARLY CHILDHOOD EDUCATION**

An in-depth analysis of current trends in early childhood education, such as early intervention, parent involvement, child advocacy and other relevant topics.

**ED-B 555A (1½) FOUNDATIONS OF CURRICULUM STUDIES**

Philosophical foundations in the study of education and curriculum: (1) conceptions of education and curriculum; (2) philosophical justifications of educational and curriculum practice; (3) historical perspectives; (4) criteria for judging education and curriculum practice; and (5) a personal stance.

**ED-B 555B (1½) FOUNDATIONS OF CURRICULUM STUDIES**

Further development and elaboration of topics in 555A. (*Prerequisite:* 555A)

**ED-B 556 (1½) CURRICULUM DEVELOPMENT**

A description of a variety of selected approaches to curriculum planning. This course aims to compare traditional Tylerian approaches to curriculum planning with alternative approaches in terms of their origins, underlying assumptions, utility in various settings, and effects. The course provides the students the opportunity to identify and characterize their own approaches to curriculum planning.

**ED-B 557 (1½) CURRICULUM IMPLEMENTATION**

A description of selected approaches to curriculum implementation. This course aims to describe and compare problems, practices, and models of implementing curriculum at institutional and individual levels and to provide students the opportunity to extract principles and procedures applicable to their own situations.

**ED-B 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA**

Application of relevant theories and models to the design and development of school curricula in a specific area. (Students may enroll in more than one of the areas listed below at 1½ units each.)

- 558A Language
- 558B Reading
- 558C English

**ED-B 580 (1½) INTERPRETIVE INQUIRY**

A basic introduction to various forms of human science research such as ethnography and phenomenology with special emphasis on the contribution of such approaches to professional practice.

**ED-B 590 (credit to be determined) SPECIAL PROBLEMS — COMMUNICATION AND SOCIAL FOUNDATIONS**

(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course. Pro forma is required for registration.)

**ED-B 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-B 597 (0) COMPREHENSIVE EXAMINATION — COMMUNICATION AND SOCIAL FOUNDATIONS**

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: INP, COM, N or F)

**ED-B 598 (credit to be determined) INDEPENDENT RESEARCH WORK — COMMUNICATION AND SOCIAL FOUNDATIONS**

(Grading: INP, COM, N or F)

**ED-B 599 (credit to be determined) THESIS — COMMUNICATION AND SOCIAL FOUNDATIONS** (Grading: INP, COM, N or F)**ED-B 642 (3) ADVANCED PROCESSES OF READING**

Advanced study and research of the acquisition and development of reading competence with special attention to psycholinguistic and neurological processes. (*Prerequisite:* 542 or suitable equivalent)

**ED-B 643 (3) ADVANCED LANGUAGE PROCESSES IN THE SCHOOL CURRICULUM**

Advanced study and research of the processes through which competence and performance in listening, speaking, and writing are developed. (*Prerequisite:* 543 or suitable equivalent)

**ED-B 644 (3) RESEARCH FOUNDATIONS FOR REMEDIAL READING**

Critical review and analysis of research in diagnosis, correction and remediation of reading difficulties; criteria for appraising research findings; educational implications. (*Prerequisites:* 442 and 544 or suitable equivalents)

**ED-B 647 (3) ADVANCED COURSE IN SECONDARY ENGLISH EDUCATION**

Advanced study of the processes of learning English language and literature in the secondary grades. (*Prerequisite:* 547 or suitable equivalent)

**ED-B 649 (3) DOCTORAL SEMINAR IN ENGLISH LANGUAGE ARTS**

A seminar at the doctoral level to consider special problems in education and educational research. Seminars are organized around educational theory and practice in the English Language Arts.

**ED-B 690 (1½ or 3) INDIVIDUAL STUDIES — COMMUNICATION AND SOCIAL FOUNDATIONS**

Under the direction of program supervisors, topics in the area of research interests of doctoral students will be examined, leading to the development of background material for a Ph.D. dissertation. (*Prerequisites:* Appropriate prerequisites to be determined in specific instances) (May be taken more than once for credit providing the course content is different from that previously taken. Pro forma is required for registration.)

**ED-B 691 (1½ or 3) SPECIAL PROBLEMS — COMMUNICATION AND SOCIAL FOUNDATIONS**

Issues pertaining to students' research interests and faculty expertise will be examined. (*Prerequisites:* Appropriate prerequisites to be determined in specific instances) (May be taken more than once for credit providing content is different from that previously taken. Pro forma is required for registration.)

**ED-B 699 (30) PH.D. DISSERTATION — COMMUNICATION AND SOCIAL FOUNDATIONS** (Grading: INP, COM, N or F)**(C) PHYSICAL EDUCATION**

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year; such offerings will depend upon student program needs and the availability of instructors.

Dr. Bruce Howe, Graduate Adviser

**ED-C 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES — PHYSICAL EDUCATION**

Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level.

**ED-C 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES — PHYSICAL EDUCATION**

Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level.

**ED-C 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA — PHYSICAL EDUCATION**

Application of relevant theories and models to the design and development of school curricula in a specific area.



**ED-C 570 (1½) SKILL ACQUISITION IN PHYSICAL EDUCATION AND SPORT**

A review of learning theories and principles as they pertain to the acquisition and retention of motor skills; the neural mechanisms involved in the learning and control of motor patterns; information processing in human performance; detailed study of research on memory, attention, retrieval systems, and movement control.

**ED-C 571 (1½) PHYSICAL EDUCATION AND SPORT IN SOCIETY**

The following represent topics which may be studied in depth: socialization into sport; institutionalized aggression in sport; current social problems in Canadian sport; comparative sport; the social history of sport in Canada; sport and international relations; the political economy of sport; a macrosociological view of sport development; social psychology of sport (motivation, personality, attitudes, social structure, group cohesion, and leadership).

**ED-C 572 (1½) PHYSIOLOGY IN PHYSICAL EDUCATION AND SPORT**

The study of physiological basis for sport performance and fitness. The assessment of physiological status and the rationale for the prescription of exercise programs. (*Prerequisite:* 441 or consent of instructor)

**ED-C 573 (1½) RESEARCH PROCESSES IN PHYSICAL EDUCATION AND SPORT STUDIES**

Students are introduced to the varieties of research methods used in physical education and sport studies (e.g., physiological, psychological, sociological, historical).

**ED-C 574 (1½) ADMINISTRATION OF PHYSICAL EDUCATION, RECREATION AND SPORT**

After presenting a theoretical base for administrative and organizational theories, a link will be made to specific situations in the fields of physical education, recreation, and sport.

**ED-C 575 (1½) PSYCHOLOGICAL ASPECTS OF PHYSICAL EDUCATION AND SPORT**

A study of the interrelationships between psychological and physical factors which occur in the pursuit of physical activity and competitive sport, from birth to maturity. Topics will include aggression in sport; personality development through physical activity; attribution theory and sport; motivation in sport; behavioural modification and physical activity; affiliation and sport; skill and mental achievement.

**ED-C 576 (1½) TEACHING AND COACHING EFFECTIVENESS IN PHYSICAL EDUCATION AND SPORT**

A review of current models of effective teaching and coaching; observation and coaching systems; analysis of teaching and coaching behaviours; a review of current research.

**ED-C 577A (1½) SEMINAR IN COACHING STUDIES: A**

A study of the problems in coaching and the research methods available for examination of these problems. (*Prerequisite:* Enrollment in the M.Ed. Coaching Studies Cooperative Program) (Taught in Summer only)

**ED-C 577B (1½) SEMINAR IN COACHING STUDIES: B**

A continuation of 577A with special attention to the discussion of cooperative experiences and the development of projects for study. (*Prerequisite:* 577A)

**ED-C 578 (1½) BIOMECHANICS**

A study of athletic performance by way of the laws of physics and mechanics. Topics include:

1. A review of the fundamental laws of physics and mechanics
2. A critical analysis of selected sport skills and techniques.

**ED-C 590 (credit to be determined) SPECIAL PROBLEMS — PHYSICAL EDUCATION**

(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course. Pro forma is required for registration.)

**ED-C 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it more than once for credit to maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-C 597 (0) COMPREHENSIVE EXAMINATION — PHYSICAL EDUCATION**

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: INP, COM, N or F)

**ED-C 598 (credit to be determined) PROJECT — PHYSICAL EDUCATION**

(Grading: INP, COM, N or F)

**ED-C 599 (credit to be determined) THESIS — PHYSICAL EDUCATION**

(Grading: INP, COM, N Or F)

**(D) PSYCHOLOGICAL FOUNDATIONS IN EDUCATION**

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year; such offerings will depend upon student program needs and the availability of instructors.

Specialty areas within the Department (Counselling, Special Education, Learning and Development, and Measurement, Evaluation and Computer Applications) have additional admission requirements and application deadlines. Prospective applicants should consult with the Graduate Adviser.

Dr. J. Hill, Graduate Adviser

**ED-D 500 (1½) LEARNING PRINCIPLES**

A survey of the literature on commonly stated principles of instrumental and classical conditioning, generalization, transfer, and retention.

**ED-D 501 (1½) THEORY OF MEASUREMENT**

An elaboration of the principles and theories of educational and psychological measurement with particular emphasis on interpretation of test reviews, applications to test development, and the design of research studies.

**ED-D 502 (1½) SEMINAR IN EDUCATIONAL EVALUATION**

Advanced topics in educational evaluation including: curriculum evaluation, teacher evaluation, grading and reporting.

**ED-D 503 (1½) CURRICULUM EVALUATION**

An examination of the issues, practices, and models of curriculum evaluation at the institutional and classroom levels.

**ED-D 504 (1½) PSYCHOLOGY OF CONCEPTUAL LEARNING**

An analysis of the problems, methods, theoretical formulations, and experimental evidence in contemporary concept learning research.

**ED-D 505 (1½) BASIC CONCEPTS IN HUMAN DEVELOPMENT**

A survey of a number of well known schools and theorists in human development. Topics relating to cognitive, personality, and moral development are stressed. Student needs and interests are important in determining course content.

**ED-D 506 (1½) SELECTED TOPICS IN HUMAN DEVELOPMENT**

Recent theory and research in a number of specific areas of human development. This course constitutes a closer and more detailed study of certain of the broader areas dealt with in 505.

**ED-D 507 (1½) PSYCHOLOGY OF INDIVIDUAL DIFFERENCES**

A focus on intellectual, emotional, physical and cultural differences between individuals. Emphasis is given on how individuals differ, causation theories, and implications for education.

**ED-D 508 (1½) THEORIES OF LEARNING**

A survey of psychological interpretations of learning, comparing modern Behaviourist and Cognitive approaches; historical perspective also given.



**ED-D 509 (1½) PSYCHOLOGY OF CLASSROOM LEARNING**

An in depth analysis of selected issues in classroom learning. The effects of student and teacher characteristics, pedagogical methodologies, and evaluational strategies on student learning are the major interest areas.

**ED-D 510 (1½) PSYCHOLOGY OF GROUP DIFFERENCES**

Analysis of group differences in human abilities including historical background, classification and measurement methodology, correlates and educational implications.

**ED-D 512 (1½) MEASUREMENT IN THE AFFECTIVE DOMAIN**

Problems in selecting objectives in the affective domain; constructing instruments to assess interests, attitudes, appreciations and values.

**ED-D 513 (1½) ASSESSMENT OF SCHOOL-RELATED ABILITIES**

Advanced study of the theory, purposes, limits and interpretation of individually administered tests and other assessment procedures used in schools. Includes tests of ability, achievement and language. (*Prerequisite*: 337 or equivalent)

**ED-D 515 (1½) ADVANCED ASSESSMENT OF LEARNING DISABILITIES**

An individualized course for graduate students specializing in assessment. Supervised observation and analysis of the intellectual, emotional, and educational problems of children with learning difficulties. (*Prerequisite*: 402, 415, or consent of instructor)

**ED-D 516 (1½) ADVANCED REMEDIATION OF LEARNING DISABILITIES**

An individualized course for graduate students specializing in the remediation of learning problems associated with physical, language, intellectual, emotional, and perceptual dysfunction. Observation, practice, and seminar discussion will be involved. (*Prerequisite*: 515 or consent of instructor)

**ED-D 517 (1½ or 3) PRACTICA IN COUNSELLING**

(May be taken more than once for credit in each of the areas listed below, normally to a maximum of 6 units, with a maximum of 3 units in each area. Prior to registration, a student is required to obtain consent from the instructor of the specific practicum and from the chair of his or her supervisory committee.) (Grading: INC, COM, N or F)

- 517A Prepracticum in Counselling
- 517B Initial Practicum in Counselling
- 517C Practicum in Child Counselling
- 517D Practicum in Adolescent Counselling
- 517E Practicum in Adult Counselling
- 517F Practicum in Creative Arts Therapy
- 517G Practicum in Community Agency Counselling
- 517H Practicum in Family Counselling
- 517J Prepracticum in Vocational Counselling  
(*Corequisite*: 519H)
- 517K Practicum in Consultation  
(*Pre-or corequisite*: 519K)
- 517L Practicum in College and University Counselling
- 517M Practicum in Skill Training for Helpers
- 517N Practicum in Cross-Cultural Counselling and Teaching

**ED-D 518 (1½) SEMINAR IN COUNSELLING PSYCHOLOGY**

Origin, development and data bases for counselling. Core elements in counselling. The life cycle, developmental needs and counselling. Contemporary counselling approaches.

**ED-D 519 (1½) ADVANCED SEMINARS IN COUNSELLING PSYCHOLOGY**

(May be taken once for credit in each of the areas listed below (1½ units each). Prior to registration, a student is required to obtain consent of the seminar instructor and from the chair of the student's supervisory committee.)

- 519A School Counselling
- 519B Research in Counselling
- 519C Professional Issues in Counselling
- 519D Creative Arts Therapy
- 519E Cognitive-Behavioural Approaches in Counselling
- 519F Human Science Counselling

- 519G Relationship Counselling
- 519H Career and Life Planning Counselling
- 519J Peer Counselling in Education
- 519K Consultation in Education and Counselling
- 519L Group Counselling
- 519M Gestalt Counselling
- 519N Cross Cultural Counselling and Teaching

**ED-D 520 (1½ or 3) EDUCATIONAL RESEARCH APPRENTICESHIP**

This course is intended to provide experience for students in conducting research, prior to designing and implementing their own thesis studies. Examples might include collaboration with other students in a joint research effort; replicating earlier studies; or carrying out research principally conceptualized by, and supervised by, an individual professor. (May be taken more than once for credit with approval of the student's supervisory committee)

**ED-D 560 (1½) STATISTICAL METHODS IN EDUCATION**

Probability theory; sampling theory; estimation; tests of hypotheses; the distribution; analysis of variance; analysis of covariance; nonparametric statistics; introduction to computer applications. (Offered conjointly with 561)

**ED-D 561 (1½) METHODS IN EDUCATIONAL RESEARCH**

The role of research in education; selecting the problem; reviewing the literature; research hypotheses; problems in measurement; sources of invalidity; models and designs in research; writing research proposals, communicating the results of research. (Offered conjointly with 560)

**ED-D 562 (1½) ADVANCED STATISTICAL METHODS IN EDUCATION**

Applied multiple linear regression; factor analysis; discriminant function analysis; canonical correlation; multivariate analysis of variance; advanced computer data processing. (*Prerequisite*: 560 or equivalent)

**ED-D 565 (1½) TASK ANALYSIS AND PRECISION TEACHING**

Task analysis models and applications; systematic description and assessment of terminal and enroute behavioural objectives; writing individual instructional plans.

**ED-D 566 (1½ or 3) SEMINAR IN SPECIAL EDUCATION**

A consideration of historical perspectives and present trends in special education theory and practice.

**ED-D 566A (1½) Issues**

A consideration of historical perspectives and present trends in special education services; funding policies, mainstreaming and zero rejection; training and utilization of aides and volunteers; parent participation in education planning. (Not available for credit on a degree program for students who have completed 566B) (Grading: INP or grade)

**ED-D 566B (3) Research**

A consideration of historical perspectives and present trends in special education, theoretical and practical issues in research and service delivery options, legal and financial policies, preparation of personnel, and assessment alternatives. (Not available for credit on a degree program for students who have completed 566A)

**ED-D 567 (1½) SEMINAR IN SINGLE SUBJECT RESEARCH DESIGNS**

This course is intended to provide students with both an understanding of single subject research designs and experience in critically evaluating research that has been conducted using this methodology. Topics considered will include both pre-experimental and experimental designs, data evaluation techniques, and the evaluation of the application of single subject designs.

**ED-D 590 (credit to be determined) SPECIAL PROBLEMS — PSYCHOLOGICAL FOUNDATIONS**

(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course. Pro forma is required for registration.)



**ED-D 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, providing the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-D 597 (0) COMPREHENSIVE EXAMINATION — PSYCHOLOGICAL FOUNDATIONS**

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: INP, COM, N or F)

**ED-D 598 (credit to be determined) PROJECT —**

**PSYCHOLOGICAL FOUNDATIONS** (Grading: INP, COM, N or F)

**ED-D 599 (credit to be determined) THESIS — PSYCHOLOGICAL FOUNDATIONS**

(Grading: INP, COM, N or F)

**ED-D 617 (credit to be determined) INTERNSHIP IN COUNSELLING PSYCHOLOGY**

Field work and advanced practical experience under supervision for doctoral candidates specializing in counselling psychology. (May be taken more than once for credit with approval of the student's supervisory committee.)

**ED-D 618 (credit to be determined) DOCTORAL SEMINARS IN COUNSELLING PSYCHOLOGY**

The doctoral seminars are organized around professional studies in counselling; counselling theory and techniques; group procedures and processes; areas of critical life choice; professional identification; ethics; and research in counselling. The seminars may be taken more than once for credit, providing the course content is different from that previously taken, by doctoral candidates upon consultation with the student's supervisory committee. The specific content of each area will be designated prior to registration.

**ED-D 690 (credit to be determined) SPECIAL PROBLEMS**

(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the supervisory committee and the instructor offering the area of individual study prior to registering in 690. Pro forma is required for registration.)

**ED-D 699 (credit to be determined) Ph.D. DISSERTATION**

(Grading: INP, COM, N or F)

**(E) SOCIAL AND NATURAL SCIENCES**

Students should consult the Graduate Programs Office in the Faculty of Education concerning the courses offered in any particular year; such offerings will depend upon student program needs and the availability of instructors.

Dr. J. Vance, Graduate Adviser

**ED-E 540 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE ELEMENTARY GRADES**

Review of the literature; critical analysis of significant research; planning curriculum research at the elementary school level. (Students may enroll in more than one of the areas listed below at 1½ units each.)

|      |                |
|------|----------------|
| 540C | Social Studies |
| 540D | Mathematics    |
| 540E | Science        |

**ED-E 541 (1½) RESEARCH IN CURRICULUM AND INSTRUCTION IN THE SECONDARY GRADES**

Review of the literature; critical analysis of significant research; planning curriculum research at the secondary level. (Students may enroll in more than one of the areas listed below at 1½ units each.)

|      |             |
|------|-------------|
| 541B | Geography   |
| 541C | History     |
| 541D | Mathematics |
| 541E | Science     |

**ED-E 558 (1½) DEVELOPMENT AND IMPLEMENTATION OF THE CURRICULUM IN A SPECIFIC AREA**

Application of relevant theories and models to the design and development of school curricula in a specified area. (Students may enroll in more than one of the areas listed below at 1½ units each.)

|      |                |
|------|----------------|
| 558C | Social Studies |
| 558D | Mathematics    |
| 558E | Science        |
| 558H | Geography      |
| 558J | History        |

**ED-E 584 (1½) MATHEMATICS EDUCATION FOR EXCEPTIONAL STUDENTS**

A compendium of diagnostic models and teaching or remediation strategies for the following categories: Perceptual and Cognitive Processing Deficits; Socially and Emotionally Impaired; Slow Learning and Mentally Retarded; Visually Impaired; Deaf or Hard of Hearing. (*Prerequisite*: 484 or consent of the instructor)

**ED-E 590 (credit to be determined) SPECIAL PROBLEMS — SOCIAL AND NATURAL SCIENCES**

(May be taken more than once for credit providing the course content is different from that previously taken. The student must obtain consent of the chair of the student's supervisory committee and the instructor offering the area of individual study prior to registering in this course. Pro forma is required for registration.)

**ED-E 591 (1½ or 3) SELECTED TOPICS IN EDUCATION**

(This is a variable content course. Students will be permitted to take it more than once for credit to a maximum of six units, provided the course content is different from that previously taken. A Pro Forma indicating the title, content, and method of evaluation will be included in each student's portfolio.)

**ED-E 597 (0) COMPREHENSIVE EXAMINATION — SOCIAL AND NATURAL SCIENCES**

Comprehensive examination which must be passed as required for individual Master of Education programs within the Faculty of Education. (Grading: INP, COM, N or F)

**ED-E 598 (credit to be determined) PROJECT — SOCIAL AND NATURAL SCIENCES**

(Grading: INP, COM, N or F)

**ED-E 599 (credit to be determined) THESIS — SOCIAL AND NATURAL SCIENCES**

(Grading: INP, COM, N or F)

## ELECTRICAL AND COMPUTER ENGINEERING

The Department of Electrical and Computer Engineering offers programs of study leading to the degrees of Master of Engineering (M.Eng.), Master of Applied Science (M.A.Sc.) and Doctor of Philosophy (Ph.D.).

The M.Eng. program consists of a minimum of 15 units of course work plus the ELEC 598 M.Eng. Project of 3 units. The M.A.Sc. program consists of a minimum of 9 units of course work plus the ELEC 599 M.A.Sc. Thesis of 12 units. The Ph.D. program consists of a minimum of 6 or 15 units of course work depending on whether the student is admitted with an M.A.Sc. degree or is transferred to a Ph.D.

program from an M.A.Sc. program plus the ELEC 699 Ph.D. Dissertation of 30 units. In addition to the minimum units of course work stated, all programs will include 1 unit for either the ELEC 509 (Master's) or ELEC 609 (Ph.D.) Seminar course which is mandatory for all graduate students.

Subject to the approval of the Department, and the appropriate Faculty regulations, a certain amount of the course work may consist of 400 level undergraduate courses taken in the Department of Electrical and Computer Engineering and graduate courses taken from other departments.



The Department participates in the Cooperative Education program of the Faculty of Graduate Studies.

Work as a research or teaching assistant is an integral part of the graduate program in Electrical and Computer Engineering.

#### Fast Track Master's Option

The Department of Electrical and Computer Engineering offers outstanding undergraduate students an opportunity for a head start in a Master's program. Qualified students will be permitted to enroll in graduate level courses during their fourth year. These courses will be extra to any undergraduate requirements and thus can be transferred to the M.A.Sc. or M.Eng. degree program. All of the admission and transfer credit regulations of the Faculty of Graduate Studies must be met. For more information, please contact the Chair or the Graduate Adviser of the Department.

All graduate students admitted after September 1989 are required to participate in a program of Seminars [ELEC 509 (Master's) or ELEC 609 (Ph.D.)] every year of their program as an addition to the normal program, except by Departmental permission.

#### Facilities

The Department has excellent computer facilities and well-equipped laboratories which enable faculty and students to conduct research in communications, signal processing, acoustics, automatic control, computer engineering, artificial intelligence, expert systems, electromagnetics, optics, power electronics, VLSI and robotics.

The computing facilities include a large number of various types of workstations supporting UNIX. They are connected to a high speed local area network and to the central University computing facilities. A large number of microcomputers of various types (Macintoshes and IBM PC compatibles) are also available for research and teaching. State-of-the-art software available on these machines can be accessed from remote stations anytime. The laboratories include facilities for designing and testing of chips, a printed circuit board design and testing facility, measuring and testing equipment for electromagnetics, optics, power electronics and robotics.

#### Admission Deadlines

The Department of Electrical and Computer Engineering will observe the following deadlines for initial applications to all programs:

##### January 15:

For applicants seeking Scholarships and Fellowships and for admission to the Summer Session commencing in May.

##### March 15:

For applicants seeking admission in September.

##### August 15:

For applicants seeking admission in January.

#### Applications

Initial inquiries regarding graduate studies in Electrical Engineering should be addressed to the Graduate Adviser, Department of Electrical and Computer Engineering. Application forms may be obtained from the Graduate Admissions and Records office.

#### Faculty and Research Interests

|   |  |
|---|--|
| Panajotis Agathoklis,<br>Dr.Sc.Tech.<br>(Swiss Fed. Inst. of Tech.) | Control systems; multidimensional systems; image processing  |
| Andreas Antoniou, Ph.D.<br>(London)                                 | Analog and digital filter design; digital signal processing; electronic circuits; optimization methods   |
| Vijay K. Bhargava, Ph.D.<br>(Queen's)                               | Digital communications; error-correcting codes, application of neural networks and expert systems in communications; mobile communications; spread spectrum                            |
| Ashoka K.S. Bhat, Ph.D.<br>(Toronto)                                | Power electronic controls; high-frequency link power conversion-resonant and pulse with modulation; applications of new power devices; design of electronic circuits for power control |

Jens Bornemann, Dr.-Ing.  
(Bremen)

James S. Collins, Ph.D.  
(Washington)

Nikitas J. Dimopoulos, Ph.D.  
(Maryland)

Peter F. Driessen, Ph.D.  
(British Columbia)

David M. Farmer, Ph.D.  
(British Columbia)

Fayez El Guibaly, Ph.D.  
(British Columbia)

Richard F. Hobson, Ph.D.  
(Waterloo)

Wolfgang J.R. Hoefer, Dr.-Ing.  
(Grenoble)

Jonathan M.-S. Kim, Ph.D.  
(Toronto)

R. Lynn Kirlin, Ph.D.  
(Utah State)

Harry H.L. Kwok, Ph.D.  
(Stanford)

Kin F. Li, Ph.D.  
(Concordia)

Warren D. Little, Ph.D.  
(British Columbia)

Wu-Sheng Lu, Ph.D.  
(Minnesota)

Eric G. Manning, Ph.D.  
(Illinois)

John W. Scrimger, Ph.D.  
(Toronto)

Dale J. Shpak, Ph.D.  
(Victoria)

Microwave/millimeter-wave components and systems design; electromagnetic field modelling in modern integrated circuits and radiating structures

Underwater acoustic telemetry; marine robotics; intelligent control; Pacific Rim technical policy

Multicomputer systems; computer interconnection networks; neural networks; expert systems

Data communications, radio communications networks; computer communications; cellular radio

Acoustic measurement of ocean processes; signal processing in ocean acoustics

VLSI design; signal and image processing; digital communications

VLSI systems and computer design: VLSI circuits, module generators, cell libraries, CAD support, high performance arithmetic circuits, microprocessor design, embedded memories, parallel computer design and ATM network interfaces; interpreter design

Microwave, millimeter wave, optical theory and applications; computational electromagnetics and numerical field modelling; high speed circuit analysis and synthesis; computer-aided design

Power electronics; magnet power supplies; microprocessor applications; uninterruptible power supplies

Statistical signal processing: speech, image, seismic data; sensor array processing; adaptive filters; parameter estimation; noise suppression

Electronic devices and IC design; device modelling

Distributed systems and artificial intelligence

Microcomputer architecture and applications; image processing; computer vision and automatic product identification; logic design

Signal and image processing; control aspects of robotics; control systems

Computer networks; distributed computing

Medical physics; photon and charged particle transport in non-homogeneous media; radiation measurement; radiation protection

Digital filter design; digital signal and image processing; digital audio; beamforming; optimization



Harold W. Smith, Sc.D.  
(M.I.T.)

H<sub>2</sub> and H<sub>∞</sub> control theory; multi-variable and computer control design; applications in the process industries

Maria A. Stuchly, Ph.D.  
(Warsaw)

Electromagnetics; interactions of electromagnetic fields with biological systems; medical applications

Stanislaw S. Stuchly, Ph.D.  
(Warsaw)

Electromagnetic engineering; radio frequency and microwave theory and techniques; industrial, scientific and medical applications of radio and microwaves

Ruediger Vahldieck, Dr.-Ing.  
(Bremen)

Microwave theory and techniques; CAD of integrated microwave and millimeter wave circuits; numerical methods in electromagnetics; optical and quasi-optical signal transmission systems

Qiang Wang, Ph.D.  
(Victoria)

Digital communications; spread spectrum communications; mobile and personal communications; error correction coding

Adam Zielinski, Ph.D.  
(Wrocław)

Underwater acoustic systems; acoustic communications and telemetry; ocean electronic instrumentation; signal acquisition and processing; electronic circuits

## GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Graduate Adviser to determine the courses which will be offered this year.

Students who have taken content equivalent courses at the University of Victoria or elsewhere will not be permitted to take these courses again for credit.

### ELEC 501 (1½) LINEAR SYSTEMS

State space description of systems. Controllability, observability and minimality. Stability and the Lyapunov criterion. Linear state feedback, asymptotic observers and compensator design. Polynomial and matrix fraction descriptions.

### ELEC 503 (1½) ENGINEERING DESIGN BY OPTIMIZATION: I

The steepest descent and Newton methods for unconstrained optimization. Golden section, quadratic and cubic line searches. Conjugate and Quasi-Newton methods for unconstrained minimization. The Fletcher-Reeves algorithm, and Fletcher algorithm with inexact line search. Design of engineering systems such as nonrecursive digital filters by using optimization algorithms. Introduction to constrained optimization and applications to the design of engineering systems.

### ELEC 504 (1½) RANDOM SIGNALS

Review of random variables. Moments and characteristic functions. Random processes, noise model, stationarity and ergodicity. Correlation and power spectrum, spectral measurements. Response of linear systems to random inputs, cross spectral densities. Narrow band noise. Introduction to discrete time and space processes. Markov chains and elementary queues.

### ELEC 505 (1½) ENGINEERING APPLICATIONS OF ADVANCED MATRIX ANALYSIS METHODS

SV, LU, QR, polar and other matrix decompositions. Eigen-Analysis of various dynamic systems. Spectral perturbation theory. Applications in digital signal processing, control systems and mechanical engineering. Computational considerations. Introduction to available numerical software. (Prerequisites: MATH 133, 458 or equivalent)

### ELEC 509 (1) SEMINAR

Participation in a program of seminars. Required of all Master's students every year of their program as an addition to the normal program except by Departmental permission. One unit of credit shall be given upon completion. (Grading: INP, COM, N or F)

### ELEC 511 (1½) ERROR CONTROL CODING TECHNIQUES IN COMMUNICATION

Communication channels and the coding problem. Important linear block codes (cyclic, Hamming, BCH and RS codes). Encoding and decoding with shift registers. Threshold decoding. Introduction to convolutional codes. Coding and system design considerations.

### ELEC 512 (1½) DIGITAL COMMUNICATIONS

Source and channel descriptions. Source digitization, entropy and the rate distortion tradeoff, lossless source codes (Huffman and run length codes), optimal and adaptive quantization. Digital modulation techniques, optimal coherent receivers, performance evaluation, the incoherent case. Special topics — case studies, fiber optics, satellite systems, mobile radio systems. (Prerequisite: 504 or equivalent)

### ELEC 513 (1½) DATA AND COMPUTER COMMUNICATIONS

Analysis and design of computer communication networks. Queueing theory. Circuit, message and packet switching. Modems, multiplexors and concentrators. Network topologies. Routing and flow control. Multiple access techniques. Capacity calculations. Throughput/delay trade-offs. Multilayer protocols and the OSI model. Survey of existing data networks, including local area networks. Packet radio and broadcast schemes.

### ELEC 521 (1½) MICROWAVE AND MILLIMETER WAVE ENGINEERING

Introduction to theory and technique of modern microwave and millimeter wave engineering. Propagation effects. Properties of various planar transmission lines at millimeter wave-length. Microwave and millimeter wave integrated circuits (mic's). CAD aspects of mic's: filters, matching networks, directional couplers, nonreciprocal devices. Nonlinear devices. (Prerequisites: 404 and 454, or equivalent)

### ELEC 522 (1½) ANTENNAS

Maxwell's equations. Retarded potential functions. The Hertzian dipole. Antenna parameters. Reciprocity theorem. Plane wave polarization. Dipole antennas. Aperture and slot antennas. Patch antennas. Antenna arrays. Plane reflectors. Paraboloidal reflectors. Subreflector systems. Reflector arrays. Traveling wave antennas. Antennas with special properties. (Prerequisites: 404 and 454, or equivalent)

### ELEC 523 (1½) OPTICAL COMMUNICATIONS

Light and electromagnetic waves, dielectric waveguides and optical fiber, light-emitting diodes, lasers, photodetectors, optical receivers, noise, sensitivity, direct detection, coherent detection, integrated optics, integrated optical devices, electro-optic effects, phase modulator, switch modulator, On/Off modulator, polarization devices, wavelength filters. (Prerequisites: 340, 404, 454 or equivalent)

### ELEC 531 (1½) DIGITAL FILTERS: I

Introduction of the digital filter as a discrete system. Discrete time transfer function. Time domain and frequency domain analysis. Structures for recursive and nonrecursive digital filters. Application of digital filters for the processing of continuous time signals. Solution of the approximation problem in recursive and nonrecursive filters. Quantization effects. (Prerequisite: 408 or equivalent)

### ELEC 532 (1½) MULTIDIMENSIONAL DIGITAL SIGNAL PROCESSING

Two and multidimensional signals. Two dimensional sampling. Multidimensional discrete Fourier transform. Design and implementation of two dimensional systems. Stability of two dimensional recursive filters and finite wordlength effects. Application in image processing, seismic signal processing and beamforming. (Prerequisite: 458 or equivalent)

### ELEC 533 (1½) DESIGN OF ANALOG FILTERS

Introduction to analog signal processing. Characterization, properties, and analysis of analog filters. Butterworth, Chebyshev, and elliptic approximations. Introduction to the realization of LC one- and two-port circuits; Darlington's method. Active elements such as gyrators and generalized impedance converters, and their representation by singular elements. Design of high-performance, low-sensitivity active filters. The course includes, in addition, a project in which a complete filter design will be undertaken. (Prerequisites: 310 and 380 or equivalent)



**ELEC 535 (1½) PATTERN RECOGNITION**

Parallel and sequential recognition methods. Bayesian decision procedures, perceptions, statistical and syntactic approaches, recognition grammars. Feature extraction and selection, scene analysis, and optical character recognition. (*Prerequisite*: 400)

**ELEC 542 (1½) ANALOG INTEGRATED CIRCUIT DESIGN**

Review of IC technology, device models and feedback. Design of monolithic op amp, regulators, multipliers, oscillators, phase-locked loops and other nonlinear circuits. Study and design of filter circuits, switched-capacitor circuits, CCD and other sampled-data circuits. System applications of analog-digital LSI. (*Prerequisites*: 380, 320 or equivalent)

**ELEC 543 (1½) DIGITAL VLSI SYSTEMS**

Evolution of VLSI. Design system concepts, integrated-circuit design approaches. Logic entry and verification tools, placement and routing algorithms. MOS circuit design techniques. Design for testability techniques. (*Prerequisite*: CENG 290 or CENG 390 or equivalent)

**ELEC 544 (1½) ANALOG VLSI AND NEURAL SYSTEMS**

Review of basic electronics; model of the neuron and its signal propagation. Amplifiers, networks and analog VLSI circuits. Time-varying signals and transient effects. The axon: its operation and its equivalent circuit. Models of the visual system and the auditory system and their chip implementation. Tactile sensor arrays and motion sensor arrays and their networking. Optical sensor arrays and their signal transmission. Other devices and circuits relevant to neural networks. (*Prerequisites*: 310, 320 and 380 or equivalent.)

**ELEC 561 (1½) MICROCOMPUTER ARCHITECTURE**

This course will study the architecture of modern 32 bit microprocessor based computers and modern signal processors. Topics covered will include packaging, performance, instructions, coprocessors, memory management, bus systems and multiprocessing. (*Prerequisite*: CENG 355 or CENG 445)

**ELEC 563 (1½) ADVANCED COMPUTER ARCHITECTURE**

Advances in computer architecture. Topics covered will include central processor speed up; memory organization and management; microprogrammed based, bit sliced, RISC and stack architectures; software and hardware features of selected computer architectures; language based computers, fault tolerant systems, associative processors, data flow architecture, and database machines. (*Prerequisite*: CENG 450 or equivalent)

**ELEC 564 (1½) NEURAL NETWORKS AND THEIR IMPLEMENTATION**

Biological inspiration, historical background, learning in neural nets (backpropagation, hebbian, etc.), single- and multi-layer networks associative memories, classification and clustering models, recurrent networks. Neural network technology, implementation software and hardware technologies, algorithm definitions, computational requirements, solution methods, parallel processing hardware. VLSI and optical implementations of neural networks. (*Prerequisites*: CENG 465 and CENG 420 or permission of the instructor)

**ELEC 565 (1½) DIGITAL ELECTRONICS**

Overview of integrated-circuit technology. Transistor-transistor logic. Emitter-coupled and current-mode logic. MOS logic. Mask-programmable ROM. RAM and EPROM technologies. Memory testing and error-correcting codes. (*Prerequisite*: CENG 290 or CENG 390 or equivalent)

**ELEC 571 (1½) UNDERWATER ACOUSTIC SYSTEMS**

Propagation of acoustic plane waves in a homogeneous medium and its electrical equivalent model. Acoustic impedance. Pressure measurements and units. Acoustic transducers and equivalent circuits. Acoustic arrays, beam forming and beam steering. Sound transmission in the ocean. Ambient noise. Sonar equations. Performance analysis of active and passive sonar systems. Introduction to specialized acoustic systems. (*Prerequisites*: 300 and 260 or equivalent)

**ELEC 581 (1½) POWER ELECTRONICS**

Characteristics of power semiconductor switching devices, e.g., SCRs, bipolar and MOS power transistors, GTOs. Gate and base drive circuits. Protection of power semiconductors. Basic principles of phase controlled converters, dc to dc choppers, dc to ac inverters (square wave and pulse width modulated), switching power supplies, resonant converters. Applications to communication and computer power supplies, electric drives, induction heating, etc.

**ELEC 582 (1½) ELECTRICAL DRIVE SYSTEMS**

Elements of drive systems, characterization of mechanical loads, requirements of electrical drive systems, dynamic equations and modeling of electrical machines, dc drives with various dc power sources, induction motor drives, ac controller, slip-energy recovery, constant air-gap flux, synchronous motor drives, permanent magnet motors, reluctance motors. (*Prerequisite*: 370 or equivalent)

**\* ELEC 590 (1½-3) DIRECTED STUDY**

A wide range of topics will be available for assignments. Topics will be restricted to recent advances.

**ELEC 598 (3) M.ENG. PROJECT**

(Grading: INP, COM, N or F)

**ELEC 599 (12) M.A.SC. THESIS**

(Grading: INP, COM, N or F)

**ELEC 601 (1½) ADAPTIVE CONTROL**

Concepts of stochastic processes and stochastic models. Analysis of dynamic systems whose inputs are stochastic processes. Minimum variance strategies for discrete systems. Self-tuning regulators and other adaptive control schemes. Examples of adaptive control implementations. (*Prerequisite*: 460 or equivalent)

**ELEC 603 (1½) ENGINEERING DESIGN BY OPTIMIZATION: II**

Constrained optimization based on the barrier and penalty methods. Design of engineering systems under constraints such as one dimensional digital filters satisfying prescribed specifications. Minimax methods and their application to the design of engineering systems such as two dimensional digital filters. The Remez exchange algorithm and its application to the design of engineering systems such as one dimensional nonrecursive digital filters. (*Prerequisite*: 503)

**ELEC 609 (1) SEMINAR**

Participation in a program of seminars. Required of all Doctoral students every year of their program as an addition to the normal program except by Departmental permission. One unit of credit shall be given upon completion. (Grading: INP, COM, N or F)

**ELEC 613 (1½) SPREAD SPECTRUM COMMUNICATIONS**

Review of basic concepts in digital communications and information theory. Direct sequence modulation and frequency hopping. Interference models. Signal acquisition. Anti-jam performance. Anti-fade performance. Coded systems. Code division multiple access. Implementation issues and applications. (*Prerequisites*: 350, 450, 511, 512 or equivalent)

**\* ELEC 619A (1½) SELECTED TOPICS IN DIGITAL COMMUNICATIONS****\* ELEC 619B (1½) SELECTED TOPICS IN COMPUTER COMMUNICATIONS****\* ELEC 619C (1½) SELECTED TOPICS IN SECURE COMMUNICATIONS****ELEC 621 (1½) NUMERICAL TECHNIQUES IN ELECTROMAGNETICS**

Introduction to theoretical principles, and applications of numerical techniques for solving electromagnetic field problems. Static and dynamic field problems in modern microwave and millimeter wave transmission media. Maxwell's equations and their principal solutions. Boundary and interface conditions. Finite difference and finite element method (FDM, FEM). Method of moments (MM). Spectral domain and mode matching techniques. Transmission line method (TLM). (*Prerequisite*: 521 or equivalent)



**ELEC 622 (1½) NONLINEAR MICROWAVE COMPONENTS**

Linearity and nonlinearity, frequency generation, representation of two-port networks, travelling wave and transmission-line concepts, scattering matrix and chain scattering matrix, Smith chart, impedance matching networks, signal flow graphs, characteristics of microwave bipolar junction and field-effect transistors, microwave transistor amplifiers, noise, broadband and high-power design methods, microwave oscillators, millimeter-wave amplifiers and oscillators, diode mixers, FET mixers, millimeter-wave mixers. (*Prerequisite*: 454 or 521 or equivalent)

**\* ELEC 629 (1½) SELECTED TOPICS IN MICROWAVES, MILLIMETER WAVES AND OPTICAL ENGINEERING****ELEC 631 (1½) DIGITAL FILTERS: II**

Design of recursive and nonrecursive digital filters satisfying prescribed specifications. Transformations. Design of wave digital filters. Effects of quantization like roundoff noise and limit cycles. Minimization of noise and elimination of limit cycles. Fast Fourier transforms and their application for the implementation of digital filters. Digital filter applications. (*Prerequisite*: 531)

**ELEC 632 (1½) ADAPTIVE FILTERS**

Applications overview. Echo cancellation, noise cancellation, equalization, speech coding, and spectral estimation using Transversal and Lattice filters. Minimum mean square error, gradient algorithm, block and recursive least squares. (*Prerequisites*: 310, 400, 408 or equivalent)

**ELEC 633 (1½) OPTIMAL ESTIMATION**

Random variables review. Estimation methods; maximum likelihood, minimum mean squared error, maximum a posteriori, conditional mean, minimum variance, orthogonality principle. State space system models. Kalman Filtering. Adaptive and nonlinear filtering. (*Prerequisite*: 504 or equivalent)

**\* ELEC 639A (1½) SELECTED TOPICS IN DIGITAL SIGNAL PROCESSING****\* ELEC 639B (1½) SELECTED TOPICS IN IMAGE PROCESSING****ELEC 642 (1½) VLSI ARRAYS FOR ITERATIVE ALGORITHMS**

Mapping algorithms onto systolic arrays. Recurrence equations. Data scheduling and projection. Data broadcast vs. pipelining. Systolic de-

sign case studies: One- and multi-dimensional digital filters, matrix algebra operations. (*Prerequisite*: CENG 465 or equivalent)

**\* ELEC 649A (1½) SELECTED TOPICS IN ELECTRONIC CIRCUITS****\* ELEC 649B (1½) SELECTED TOPICS IN VLSI DESIGN****ELEC 651 (1½) CONTROL ASPECTS IN ROBOTICS**

Direct and inverse kinematics. Direct and inverse dynamics. Path planning. PID control and its robustness. Computer torque method. Resolved acceleration control. Differential geometric approach. Adaptive control as applied to manipulators. Hybrid force/position control. Robustness issues of various control algorithms. Computational considerations. (*Prerequisites*: 425 and 501 or equivalent)

**\* ELEC 659A (1½) SELECTED TOPICS IN ROBOTICS****\* ELEC 659B (1½) SELECTED TOPICS IN AUTOMATIC CONTROL****ELEC 661 (1½) INTRODUCTION TO PARALLEL COMPUTER SYSTEMS**

General formalism and description of parallel systems. Sequential and parallel execution. Synchronization. Principles of pipeline and vector processing. SIMD and MIMD machines. Multi-stage and computer interconnection networks. Routing (e-cube, hyperswitch, wormhole, virtual stage channels) and flow control in computer interconnection networks. Shared memory and multicomputer systems. Caches and cache coherence. Data flow systems (macro and micro data flow). (*Prerequisite*: CENG 450 or equivalent)

**\* ELEC 669 (1½) SELECTED TOPICS IN COMPUTER ENGINEERING****\* ELEC 679 (1½) SELECTED TOPICS IN UNDERWATER ACOUSTIC SYSTEMS****\* ELEC 689 (1½) SELECTED TOPICS IN POWER ELECTRONICS****ELEC 699 (30) PH.D. DISSERTATION**

(Grading: INP, COM, N or F)

\* These are variable content courses. Students will be permitted to take them more than once for credit to a maximum of three units, provided the course content is different from that taken previously.

## ENGLISH

The Department of English offers the M.A. (with or without thesis) and Ph.D. degrees in English, Canadian, American, and Postcolonial/Commonwealth Literature, as well as Critical Theory. All candidates for these degrees must meet all the general requirements of the University of Victoria Faculty of Graduate Studies as well as the specific requirements of the Department of English. A minimum TOEFL score of at least 630 is required of all foreign students whose first language is not English.

A detailed departmental guide, *A Handbook for Graduate Students*, is available on request.

**Master of Arts**

1. Requirements for Admission: At least a high second class standing (normally a B+ average) (6.00 G.P.A.) in the final two years of undergraduate work.
2. Period of residence: With a good Honours B.A. or a strong major in English, a full time student could finish the M.A. within one calendar year. A part time student, or one who is required to make up course work at the undergraduate level, would normally need at least two years for completion of the degree.
3. Language Requirement: Reading knowledge of one appropriate language other than English.
4. The Department offers two programs of equal status, leading to the M.A. degree:

**A. Thesis option**

- (a) 5 courses (1½ units each),  
one of which is English 500 = 7½ units
- (b) thesis (7½ units) = 7½ units  
15 units

**B. Nonthesis option**

- (a) 8 courses (1½ units each),  
one of which is English 500 = 12 units
- (b) Conference paper  
(English 598, 3 units) = 3 units  
15 units

5. The course of study for each individual M.A. candidate will be determined by the Director of English Graduate Studies in consultation with the student. Transfer is possible from one program to the other, except in cases where a student has been asked to withdraw.

**Doctor of Philosophy**

1. Requirement for Admission: Generally an M.A. degree, with a minimum average of A- in graduate courses. It may be possible for an exceptional student in our M.A. program to enter the Ph.D. program before completing the M.A., but not before the completion of one Winter Session and a superior performance in five graduate courses.



2. Residence Requirement: A student proceeding to the degree of Doctor of Philosophy must register at the University of Victoria and pursue studies under the direction of a faculty member as a full time student for at least two Winter Sessions, except that a student entering the Doctoral program with a Master's degree will have this residence requirement reduced to one Winter Session. (5.3.2)
3. Course Requirements: Four one-term graduate courses beyond those taken as part of an M.A. program. One of these courses will be English 500, unless a student has already taken it or its equivalent. Students may be required to take courses in areas where they are deficient.
4. Language Requirement: Reading knowledge of two appropriate languages other than English.
5. Examinations: Within two years of registration as a doctoral candidate and at least six months before completion of the degree, a student must pass a "candidacy examination" (5.8). This examination consists of three sections, two written and one oral: 1) A Special Topics paper on a genre, theory, group of authors etc. appropriate to the student's interest, based on a reading list established in consultation with a Special Topics adviser and approved by the department's Graduate Committee. 2) An Oral examination on that paper and reading list given by the student's supervisory committee and chaired by the Director of Graduate Studies. 3) A General Paper on the literary period of the student's specialization, based on a reading list set by the department and reviewed annually. Examinations will be offered three times a year (in May, September and January); students do not usually take both written exams at the same sitting.
6. Teaching Assistantships: As an integral part of their program, Ph.D. students are required to undertake teaching assistantships or equivalent duties within the department.
7. Unit values:
 

|                                     |                    |
|-------------------------------------|--------------------|
| 4 courses (1.5 units each)          | 6 units            |
| Candidacy examination (English 698) | 6 units            |
| Dissertation (English 699)          | 18 units (minimum) |
|                                     | 30 units (minimum) |

#### Faculty and Areas of Interest

|   |  |
|---|--|
| Elizabeth Archibald, Ph.D.<br>(Yale)          | Medieval and early renaissance literature  |
| Edward I. Berry, Ph.D.<br>(Calif., Berkeley)  | Shakespeare; Sidney; renaissance literature  |
| Michael R. Best, Ph.D.<br>(Adelaide)          | Renaissance drama; Shakespeare; Australian literature; computer-assisted learning  |
| G. Kim Blank, Ph.D.<br>(Southampton)          | Romantic poetry; critical theory; popular fiction; canonization  |
| Luke Carson, Ph.D.<br>(Calif., Los Angeles)   | Modern American poetry; critical theory; literary criticism; 19th and 20th century American literature   |
| Thomas R. Cleary, Ph.D.<br>(Princeton)        | Restoration and 18th century literature; the novel; history of criticism; prose style; baroque art and architecture; early romantic poetry; 19th century American literature |
| Evelyn M. Copley, Ph.D.<br>(British Columbia) | Critical theory; comparative literature; 20th century British and American fiction   |
| Misao A. Dean, Ph.D.<br>(Queen's)             | Canadian novel, especially before World War I; writing by women, especially 1880-1920; first-wave feminism   |
| James A. Dopp, Ph.D.<br>(York)                | Contemporary Canadian poetry and fiction; critical theory; post-modern detective fiction   |
| Charles Doyle, Ph.D.<br>(Auckland)            | Modern poetry and poetics; modernism; Pound; Williams; Stevens; biography  |
| Anthony S. G. Edwards, Ph.D.<br>(London)      | Medieval and early renaissance literature; bibliography and textual criticism  |

|  |  |
|--|--|
| Diane T. Edwards, Ph.D.<br>(Princeton)                                     | Biblical and modern literature; Anglo-Irish literature   |
| Anthony B. England, Ph.D.<br>(Yale)  | Early 18th and early 19th century British literature   |
| Toby A. Foshay, Ph.D.<br>(Dalhousie)                                       | Critical theory; history of criticism; modern British literature   |
| Bryan N.S. Gooch, Ph.D.<br>(London)  | 17th and 18th century British literature; relationship between poetry and music; musical settings of British literature, including Shakespeare; Canadian literature                    |
| Patrick Grant, D.Phil.<br>(Sussex)   | Renaissance and modern literature; literature and theology; literature and the history of science  |
| Sneja Gunew, Ph.D.<br>(Newcastle, Australia)                               | Critical and cultural theory; Australian multi-cultural writing; feminist theory   |
| John G. Hayman, Ph.D.<br>(Northwestern)                                    | Victorian literature; Bloomsbury Group   |
| Anthony W. Jenkins, Ph.D.<br>(Calif., Berkeley)                            | Medieval literature; renaissance, 19th and 20th century drama; the British novel   |
| Smaro Kamboureli, Ph.D.<br>(Manitoba)                                      | 20th century Canadian literature, especially the long poem, ethnic writing, and the canon; literary, feminist, and multi-cultural theory; genre theory; women's writing; autobiography |
| Arnold Keller, Ph.D.<br>(Concordia)  | Writing instruction; computer applications to the teaching of English; hypertext; instructor response  |
| Kathryn Kerby-Fulton, D.Phil.<br>(York, England)                           | Middle English literature; medieval Latin religious writings, especially apocalyptic and visionary works; allegorical literature; autobiographical literature; manuscript studies      |
| Patricia J. Köster, Ph.D.<br>(London)                                      | Restoration and 18th century literature, especially women novelists and playwrights  |
| Margot K. Louis, Ph.D.<br>(Toronto)  | 19th century poetry: Barrett Browning, Dickinson, Swinburne and the pre-Raphaelites; 19th and 20th century poetry concerning visions of female deity                                   |
| Lorraine McMullen, Ph.D.<br>(Ottawa)                                       | Early Canadian literature  |
| Judith I. Mitchell, Ph.D.<br>(Alberta)                                     | 19th century novel, especially Charlotte Brontë, George Eliot, Thomas Hardy; women's poetry; feminist theory   |
| Victor A. Neufeldt, Ph.D.<br>(Illinois)                                    | 19th century British literature  |
| Colin J. Partridge, Ph.D.<br>(Nottingham)                                  | Commonwealth literature; American literature; film studies   |
| Sheila M. Rabillard, Ph.D.<br>(Princeton)                                  | Modern drama; theories of drama and performance; gender studies; modern literature   |
| Beryl Rowland, Ph.D.<br>(British Columbia),<br>D.Litt. (Mount St. Vincent) | Medieval literature  |
| Robert M. Schuler, Ph.D.<br>(Colorado)                                     | Renaissance literature; relations between literature and science; textual criticism  |



Stephen A.C. Scobie, Ph.D.  
(British Columbia)

Terry G. Sherwood, Ph.D.  
(Calif., Berkeley)

Herbert F. Smith, Ph.D.  
(Rutgers)

Nelson C. Smith, Ph.D.  
(Washington)

Henry E. Summerfield, M. Litt.  
(Durham)

Lisa A. Surridge, Ph.D.  
(Toronto)

Reginald C. Terry, Ph.D.  
(London)

David S. Thatcher, Ph.D.  
(Alberta)

John J. Tucker, Ph.D.  
(Toronto)

Trevor L. Williams, Ph.D.  
(Wales)

Canadian literature; modern poetry; Scottish literature; literature and the other arts, especially film and painting; critical theory (Derrida, deconstruction)

Renaissance literature; religion and literature; early modern subject formation; Shakespeare; Donne; Jonson; Herbert; Milton

19th century American literature; structuralism; post-structuralism; post-modern fiction, literature and science

The novel; American and Canadian literature; 19th century British fiction; mystery fiction

18th and 20th century British literature

19th century British fiction; women writers; the Victorian actress; 19th century representations of domestic violence; feminist theory and criticism

19th-century British literature; modern drama

Shakespeare; 20th century British literature

Linguistics and critical theory; modern and medieval poetry

James Joyce; modern British literature; marxist literary theory; popular culture; literature of war

## ENGL 506 (1½) STUDIES IN LITERARY THEORY: II

This Year: Economies of the Aesthetic

What remains of the critical capacity, or "negativity," of aesthetic practice in late capitalism? Contemporary examinations of the simultaneously complicitous and critical relationship of the aesthetic to its social, political and economic conditions. Will focus on Kant's *Critique of Judgment* as a precondition to current debates concerning modernity, modernism and postmodernism; the legacy of Kant in modern aesthetic theory. S(3-0)

## ENGL 510 (1½) STUDIES IN OLD ENGLISH LITERATURE: I

NO(3-0)

## ENGL 511 (1½) STUDIES IN OLD ENGLISH LITERATURE: II

NO(3-0)

## ENGL 515 (1½) STUDIES IN MIDDLE ENGLISH LITERATURE: I

This Year: Medieval Romance

An examination of romance as a very characteristic medieval genre; themes and conventions used or adapted in later centuries (Shakespeare's late plays, Spenser, the novel); texts include a wide range of Arthurian and non-Arthurian romances; topics for discussion include definitions of romance, chivalry, "courtly love," representation of women, family separation and reunion, quest for identity, role of religion in romance, legacy of medieval romance to later literature. F(3-0)

## ENGL 516 (1½) STUDIES IN MIDDLE ENGLISH LITERATURE: II

NO(3-0)

## ENGL 520 (1½) STUDIES IN RENAISSANCE LITERATURE: I

NO(3-0)

## ENGL 521 (1½) STUDIES IN RENAISSANCE LITERATURE: II

NO(3-0)

## ENGL 530 (1½) STUDIES IN THE LITERATURE OF THE 17TH CENTURY: I

This Year: Donne and Jonson: Literature in Culture

A study of the works of two close contemporaries, John Donne (1572-1631) and Ben Jonson (1572-1637), in their respective cultural contexts (including Inns of Court, patronage systems, the monarchical Court, Church of England, commercial theatre) and in light of New Historicist, cultural materialist and Postmodernist strains in the current revaluation of Renaissance literature. F(3-0)

## ENGL 531 (1½) STUDIES IN THE LITERATURE OF THE 17TH CENTURY: II

NO(3-0)

## ENGL 540 (1½) STUDIES IN THE LITERATURE OF THE 18TH CENTURY: I

This Year: Utopia and Dystopia in 18th-Century Novels by Women  
Six novels from Sarah Fielding to Elizabeth Hamilton, showing the possibility of only a limited utopia, as located in an extended family or a single village, rather than a whole society, and even then threatened or destroyed by the "Real" (dystopian) world, a powerful negative force; some attention to literary and social background. S(3-0)

## ENGL 541 (1½) STUDIES IN THE LITERATURE OF THE 18TH CENTURY: II

NO(3-0)

## ENGL 550 (1½) STUDIES IN THE LITERATURE OF THE 19TH CENTURY: I

This Year: Domestic Violence in Victorian Fiction

Examines the representation of wife battery by Victorian novelists, their illustrators, and their critics; issues to be discussed include the legal rights of the battered or imprisoned woman, the tensions surrounding public scrutiny of the domestic sphere, the use of narrative screening devices in texts which address domestic violence, class-based differences in the representation of violence, indirect techniques of representing wife battery. S(3-0)

## ENGL 551 (1½) STUDIES IN THE LITERATURE OF THE 19TH CENTURY: II

NO(3-0)

## ENGL 560 (1½) STUDIES IN THE LITERATURE OF THE 20TH CENTURY: I

NO(3-0)

## GRADUATE COURSES AND SEMINARS

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

All courses except 500 are variable content.

Under certain circumstances it will be possible to include one of the "Studies" courses (505-586) more than once in a student's program of studies.

### ENGL 500 (1½) INTRODUCTION TO BIBLIOGRAPHY AND METHODS OF RESEARCH

This course seeks to introduce students to techniques of scholarly study and practice. The course will include introductions to bibliographical tools and terminology, to principles of editing and to various aspects of scholarly procedure: the use of manuscript materials, appropriate forms of citation and documentation, and the preparation of materials for publication.

Note: This course is compulsory for all graduate students, except those who can show equivalent previous credit. FS(3-0)

### ENGL 503 (1½) SPECIAL STUDIES: I

This Year: Feminist Theory and Theatre

An exploration of the capacity of drama to shape and redefine feminist issues, as well as the ways in which feminist theory can inform the writing, production, and reception of drama; theoretical readings ranging from recent work by Butler, Phelan, and de Lauretis, to current reconsiderations of the Brechtian aspects of feminist drama, to French feminists as both dramatists and theorists; play texts by British, Canadian, U.S., and French playwrights. F(3-0)

### ENGL 504 (1½) SPECIAL STUDIES: II

NO(3-0)

### ENGL 505 (1½) STUDIES IN LITERARY THEORY: I

This Year: Language and Critique: The Role of Linguistics and Semiotics in Modern Critical Theory

Examining role of linguistic theory in structuralist and poststructuralist thought and critical practice; works by Kristeva, Jakobson, Barthes, Culler, Derrida; recent critiques of Saussurean theory by Harland and Pavel. F(3-0)



**ENGL 561 (1½) STUDIES IN THE LITERATURE OF THE 20TH CENTURY: II** NO(3-0)

**ENGL 570 (1½) STUDIES IN AMERICAN LITERATURE: I** NO(3-0)

**ENGL 571 (1½) STUDIES IN AMERICAN LITERATURE: II** NO(3-0)

**ENGL 580 (1½) STUDIES IN COMMONWEALTH AND POSTCOLONIAL LITERATURES: I**

This Year: Postcolonial Criticism

Explores the ways postcolonial criticism arises in part out of Commonwealth literary studies, its recent engagements with constructions of national literatures, the influence of cultural imperialisms, and the nature of marginal cultures and marginalities within cultures; a survey of some dominant critics and writers; major debates and exploration of its challenges to orthodoxies and traditions comprising European or western literatures and cultures. F(3-0)

**ENGL 581 (1½) STUDIES IN COMMONWEALTH AND POSTCOLONIAL LITERATURES: II**

This Year: Three Major Novelists of the Modern Commonwealth

Detailed study of selected narratives by V.S. Naipaul, Patrick White, and Margaret Laurence; the literary construction of a dialectical awareness through dramatized phenomena in a narrative; the significance of reflecting crises within a "different" society on the reader's culture and values. S(3-0)

**ENGL 585 (1½) STUDIES IN CANADIAN LITERATURE: I**

This Year: Findley and Ondaatje

Selected texts by Timothy Findley and Michael Ondaatje, with a particular focus on how the texts explore or dramatize the possibilities of human agency; an interrogation of the link between artistic and political agency implied by the texts; discussion will be centered on the context of contemporary theoretical debates about the human subject, gender, and the relationship between literature and politics. F(3-0)

**ENGL 586 (1½) STUDIES IN CANADIAN LITERATURE: II**

This Year: Contesting the "Canon"

A study of selected Canadian fiction and criticism in the context of recent theoretical and critical debates about canonicity, nationalist discourse, globalism, and modes of cultural production. S(3-0)

**ENGL 590 (1½) DIRECTED READING: I** (3-0)

**ENGL 591 (1½) DIRECTED READING: II** (3-0)

**ENGL 598 (3) CONFERENCE PAPER**

The student will present a paper (maximum 5,000 words/40 minutes) as s/he would at an academic conference. Questions will be invited from the general audience as well as from the examining committee. (Grading: INP, COM, N or F)

**ENGL 599 (7½) M.A. THESIS** (Grading: INP, COM, N or F)

**ENGL 698 (6) CANDIDACY EXAMINATION** (Grading: INP, COM, N or F)

**ENGL 699 (18-33) Ph.D. DISSERTATION** (Grading: INP, COM, N or F)

## FRENCH LANGUAGE AND LITERATURE

The Department of French Language and Literature offers two programs leading to the M.A. degree, each composed of a minimum of fifteen units of graduate credit: (1) nonthesis option designed to be completed in one calendar year, and (2) thesis option. All candidates for these degrees must meet all the general requirements of the University of Victoria Faculty of Graduate Studies as well as the specific requirements of the Department of French Language and Literature.

Admission to either program requires a B.A. degree in French with a minimum overall average GPA of 6.50 in the 3rd and 4th year French courses. This qualification should consist of a minimum of fifteen units of senior undergraduate course work in French, which course work should normally include 390, 402, or their equivalents, and six additional units in literature courses. Students with background deficiencies in French may be required to make up courses before being admitted to the M.A. program and will then normally require two years for the completion of the degree.

Candidates are required to possess a reading knowledge of English and must satisfy the department that they have a reading knowledge of another appropriate language, in addition to French and English.

### (1) Nonthesis option:

- (a) twelve units of course work, three of which may be drawn from courses in French offered at the senior undergraduate level, and not more than three units drawn from M.A. offerings in appropriate departments.

- (b) FREN 598 (3 units): Reading List drawn up by each student in consultation with advisers, short critical paper (approximately 10 pages) and oral examination.

The Reading List will normally consist of thirty titles covering a period (e.g. a century), a genre (e.g. drama), a movement (e.g. Surrealism), or a specific topic (e.g. women writers). Originating in one or more of each student's courses, the list will offer the students the possibility of specialization in a chosen field and preparation for further study. Evaluation will be by oral examination (normally held at the end of August). The examiners will assess the students' ability to express themselves in a literate and critical way, and to synthesize an extensive amount of reading. The critical paper will be the focus of the oral examination.

- (2) Thesis option (normally by invitation of the departmental Graduate Committee):

- (a) nine units of course work, three of which may be drawn from courses in French offered at the senior undergraduate level.  
(b) FREN 599 (6 units): thesis (25,000 word maximum) and an oral defense. The thesis topic selected by the candidate must have the approval of both the supervisory committee and the Graduate Committee. This regulation also applies to any substantial change from the approved topic which the candidate may wish to make in the course of his or her research.

### Faculty and Areas of Interest

|   |   |
|---|---|
| Barrington F. Beardsmore, Ph.D.<br>(British Columbia) | Medieval studies and history of the language  |
| Claire Carlin, Ph.D.<br>(Calif., Santa Barbara)       | 17th century literature   |
| John C.E. Greene, D. de l'Univ.<br>(Grenoble)         | 19th century French literature  |
| Emmanuel Hérique,<br>D. de IIIe cycle<br>(Nancy)      | French linguistics: phonetics, stylistics   |
| Yvonne Y. Hsieh, Ph.D.<br>(Stanford)                  | 20th century poetry, 19th and 20th century literature, East-West literary relationships |
| Marc Lapprand, Ph.D.<br>(Toronto)                     | Literary theory, stylistics, 20th century literature                                    |
| Elaine Limbrick, D. de IIIe cycle<br>(Poitiers)       | Montaigne; 16th century French literature and history of ideas                          |
| Sada Niang, Ph.D.<br>(York)                           | African and Caribbean Literatures   |
| Mary Ellen Ross, Ph.D.<br>(Toronto)                   | 18th century literature, Canadian literature  |
| Danielle Thaler, Ph.D.<br>(Toronto)                   | 19th century literature, children's literature, creative writing, translation           |
| Marie Vautier, Ph.D.<br>(Toronto)                     | Comparative Canadian literature, literary theory  |
| Jennifer R. Waelti-Walters,<br>Ph.D. (London)         | 20th century novel, women's writing   |



## GRADUATE COURSES

Students should consult the Department concerning courses to be offered in a particular year.

**FREN 502A (1½) ADVANCED LANGUAGE TEACHING: I**

This seminar, intended for students in the M.A. (Teaching Emphasis Option) Program, will review various aspects of the French language from the point of view of the practicing teacher. It will explore also the subtleties inherent in advanced French language usage through textual analysis, translation and oral presentations. F(2-0)

**FREN 502B (1½) ADVANCED LANGUAGE TEACHING: II**

Application of techniques and skills acquired in 502A to the teaching of the French language. (Prerequisite: 502A) S(2-0)

**FREN 505A (1½) LITERARY CRITICISM AND METHODS: I**

Structuralism and its legacy  
A study of the legacy of structuralism, including major works by Barthes, Foucault, Genette, and Lévi-Strauss. The approach will be both historical and critical. NO(3-0)

**FREN 505B (1½) LITERARY CRITICISM AND METHODS: II**

Postmodernism: Theory and Practice  
Various aspects of postmodernism in literature: postmodernist revision of history; emphasis on metafiction and on intertextuality; blurring of genres; the use and abuse of myth; and postmodern challenge to Christian liberal humanist ideologies. These theories will be illustrated through analyses of Québécois novels. NO(3-0)

**FREN 508A (1½) STUDIES IN MEDIEVAL LITERATURE: I**

The Evolution of French Arthurian Romance in the 12th and 13th Centuries

A study of the contributions made first by the 12th century poet, Chrétien de Troyes, and subsequently by the anonymous authors of the 13th century Lancelot-Graal cycle of prose romances. NO(3-0)

**FREN 508B (1½) STUDIES IN MEDIEVAL LITERATURE: II** NO(3-0)**FREN 509A (1½) STUDIES IN RENAISSANCE LITERATURE AND THOUGHT: I**

French Renaissance Thought  
The evolution of sceptical thought in the French Renaissance from its early expression in the works of Rabelais, Pierre de la Ramée and Guy de Brués to its final development on Montaigne's *Apologie de Raimond Sebond*. NO(3-0)

**FREN 509B (1½) STUDIES IN RENAISSANCE LITERATURE AND THOUGHT: II**

The relationship between literature and the arts in the context of literary theory and practice in the works of the Pléiade poets and their successors. NO(3-0)

**FREN 511A (1½) STUDIES IN 17TH CENTURY LITERATURE: I**

Seventeenth Century Tragedy  
The evolution of the genre during its essential period of development in the early part of the century, followed by its culmination in the theatre of Corneille and Racine. Included are works not normally treated in the undergraduate curriculum. F(3-0)

**FREN 511B (1½) STUDIES IN 17TH CENTURY LITERATURE: II**

Seventeenth Century Comedy  
The plays of Molière and his immediate predecessors. The many varieties of comic theatre will be considered, including farce, the burlesque, 17th century versions of classical comedy, "problem plays," and Molière's original contribution, *la comédie ballet*. NO(3-0)

**FREN 512A (1½) STUDIES IN 18TH CENTURY LITERATURE: I**

Eighteenth Century Comedy  
The evolution of comedy in the 18th century traced through study of characteristic works from the Comédie française repertory and also of some works presented by popular theatres, such as the *foire*. Aspects of works not usually covered in the undergraduate curriculum. NO(3-0)

**FREN 512B (1½) STUDIES IN 18TH CENTURY LITERATURE: II**

NO(3-0)

**FREN 514A (1½) STUDIES IN 19TH CENTURY LITERATURE: I**

The Goncourt Brothers and the Novel of the Working Class  
The Goncourt brothers, forerunners of the naturalist movement, created a prototype for an entirely new kind of literature, the fiction dealing with the working class. This course will assess to what extent the novelists gave the "people" entry to the novel and will explore the perception of feminine mystique presented by the authors. NO(3-0)

**FREN 514B (1½) STUDIES IN 19TH CENTURY LITERATURE: II**

Narrative Techniques in Short Fiction of the 19th Century  
A short study of complex narratives in the mid-nineteenth century, concentrating on the nouvelle. The first half of the course will establish techniques of analysis, based on Barbey d'Aurevilly's *Les Diaboliques*. The second half will apply these techniques to other texts. S(3-0)

**FREN 516A (1½) STUDIES IN EARLY 20TH CENTURY LITERATURE: I**

Gender Relation in Literature of the Belle Epoque  
A re-examination of selected early works of Proust and Gide studied in the social context of *fin-de-siècle* France and against the background of certain successful women writers of the period: Colette, Rachilde, Tinayre, Yver. NO(3-0)

**FREN 516B (1½) STUDIES IN EARLY 20TH CENTURY LITERATURE: II**

Vian in Context  
Vian's emergence as an emblematic figure in France's post-war years: his inventiveness, elaborate and characteristic play on language, and radical attacks on old and worn-out institutions. Works by his contemporaries (Queneau, Prévert) will also be studied. NO(3-0)

**FREN 517A (1½) STUDIES IN LATE 20TH CENTURY LITERATURE: I**

Michel Butor and the *Nouveau Roman*  
The beginnings of the nouveau roman in the 1950's, its philosophy, and the early works by writers such as Robbe-Grillet, Duras, Sarraute. Particular emphasis on the works of Michel Butor. NO(3-0)

**FREN 517B (1½) STUDIES IN LATE 20TH CENTURY LITERATURE: II**

Jeanne Hyvrard  
The evolution of her thought and techniques of writing in the context of other contemporary women writers. NO(3-0)

**FREN 519A (1½) CHILDREN'S LITERATURE: I**

Fairy Tales: Oral and Written Traditions  
The origins and evolution of fairy tales with particular emphasis on contemporary tales and the re-evaluation of key figures such as fairies, witches and monsters. Theoretical framework will be based on studies by V. Propp, B. Bettelheim and M. Soriano. NO(3-0)

**FREN 519B (1½) CHILDREN'S LITERATURE: II** NO(3-0)**FREN 528 (1½) LINGUISTIC READINGS OF LITERARY TEXTS**

Stylistics applied to a great variety of short written texts, mostly literary: the norm in syntax and grammar, its limits, creative effects, *nuances*, *genres*, the different voices in a text. This course bridges the gap between literature and grammar. F(3-0)

**FREN 571A (1½) STUDIES IN FRENCH-CANADIAN AND QUEBEC LITERATURE: I**

Ferron, Polygraphe  
The multifaceted work of Jacques Ferron, novelist, playwright, and *conteur*. Important works by Ferron read in the ideological context of the pre- and post-Referendum periods, and also as works of magical realism, presenting a characteristic blurring of the boundaries of real and unreal. NO(3-0)



**FREN 572A (1½) STUDIES IN FRENCH-CANADIAN AND QUEBEC LITERATURE: II**

The Québécois Novel 1960-65 and 1980-85: Politics, History, Ideology  
The distinct periods in the contemporary Québécois novel: the *engagé* period at the beginning of the Quiet Revolution (1960), the post-Referendum period (1980-85) and the narrative forms related to them: firstly, fragmentation, auto-referentiality, and irony; secondly, *l'américanité*, parody, and magic realism.

F(3-0)

**FREN 574 (1½) STUDIES IN AFRICAN AND CARIBBEAN LITERATURE: I**

Ideological and Stylistic Characteristics of African and Caribbean Literatures

A study of the ideological and stylistic features of texts by male and female writers. Critical assessment of the issues of marginalizations, alterity and the emergence of a literary canon in African and West Indian literatures.

S(3-0)

**FREN 575 (1½) SPECIAL TOPICS: I**

Exoticism in French Literature from Bernardin de Saint-Pierre to Marguerite Duras

Different facets and functions of exoticism in French literature from the late eighteenth century to the twentieth century, including writers such as Bernardin de Saint-Pierre, Chateaubriand, Loti, Segalen, Yourcenar and Duras.

NO(3-0)

**FREN 590 (1½ or 3) DIRECTED STUDIES****FREN 598 (3) READING LIST / ORAL**

Reading list of approximately 30 titles drawn up in consultation with advisers, a short critical paper, and an oral exam.

**FREN 599 (6) THESIS/ORAL**

(Thesis option is by invitation of the Graduate Committee only.)

Thesis (topic to be selected in consultation with Graduate Committee as the development of course work) and oral examination.

(Grading: INP, Com, N or F)

## GEOGRAPHY

The Department of Geography offers courses of study and research leading to M.A., M.Sc. and Ph.D. degrees. Admission to the Departmental graduate program is normally granted only to those students having honours or major degrees with first or second class standing in geography (at least a B+ average: — 6.00 G.P.A.). Students from the British Isles, for example, are expected to have obtained at least an upper second class honours degree. A promising student lacking such qualifications may be allowed to make up this deficiency, being required to register as an unclassified student.

**Program of Study**

The graduate program requires attendance at formal courses and the presentation and defence of a thesis or dissertation. A minimum of 9 units of course work is required for the M.A. and M.Sc. degrees, and an additional 7½ for the Ph.D. The Master's thesis is worth 10 units, giving a total of 19 for the Master's degree; the Ph.D. dissertation is worth 24 units, giving a total of 31½ for the Ph.D.

All graduate students are required to take GEOG 500 and 522. M.A. students are required to take GEOG 523. M.Sc. students are required to take GEOG 524 and 525. All students must have completed an acceptable course on statistical analysis or enrol in GEOG 321 as an additional course. Students may take only one GEOG 590 course (directed studies) as part of the ir course requirements. A student normally should expect to spend two years of academic work to obtain a Master's degree. Doctoral candidates are normally required to spend two years in residence and should complete the program in three years. If a student has successfully completed a core course topic as part of an earlier degree requirement, that course must be replaced by another of equal unit value, the choice being made in consultation with the supervisory committee and approved by the Graduate Adviser.

Inquiries concerning the graduate program should be addressed to the Graduate Studies Adviser, Department of Geography. Application forms for admission, which include the indication of need for financial assistance, can be obtained directly from the Faculty of Graduate Studies. Applications requesting University Fellowships must be received by January 31st. Completed applications and supporting documents received before March 31st will be given consideration for entry in September of that year. Applications received thereafter may be considered providing space is available or considered for admission in September of the following year.

**Coop Program**

The Cooperative education program extends the regular program with work term(s) in government or industry. Research undertaken during the work term is intended to relate to the student's research interest area. The work periods are jointly supervised by the employer and the Department of Geography.

**Faculty and Research Interests**

Gary A. Borstad, Ph.D.  
(McGill)

Remote sensing and oceanography

Philip Dearden, Ph.D.  
(Victoria)

Resources: Protected areas, conservation, Thailand

David Duffus, Ph.D.  
(Victoria)

Resources: Conservation, wildlife, marine

Michael C.R. Edgell, Ph.D.  
(Birmingham)

Physical: Biogeography; resources

Mark S. Flaherty, Ph.D.  
(McMaster)

Resources: Land management; quantitative; Thailand

Harold D. Foster, Ph.D.  
(London)

Physical: Applied geomorphology; natural hazards; medical geography

Lesley T. Foster, Ph.D.  
(Toronto)

Medical geography

Eugene D. Hetherington, Ph.D.  
(British Columbia)

Hydrology and meteorology

C. Peter Keller, Ph.D.  
(Western)

G.I.S.: Spatial analysis; cartography

David C.Y. Lai, Ph.D.  
(London)

Urban: Ethnicity; Chinatowns; overseas Chinese; China; Hong Kong

Stephen C. Lonergan, Ph.D.  
(Pennsylvania)

Resources: Economic/ecological models; poverty and environment; South East Asia

Lawrence D. McCann, Ph.D.  
(Alberta)

Urban: Historical; regional planning

Pamela Moss, Ph.D.  
(McMaster)

Urban: Social; feminism

K. Olaf Niemann, Ph.D.  
(Alberta)

Remote Sensing/Physical: remote sensing, geomorphology

J. Douglas Porteous, Ph.D.  
(Hull)

Urban: Planning; behavioral; humanistic; Latin America; environmental aesthetics

H. Jack Ruitenbeek, Ph.D.  
(London)

Environmental economics

Mark W. Sondheim, Ph.D.  
(British Columbia)

G.I.S. and remote sensing

Daniel J. Smith, Ph.D.  
(Alberta)

Physical: Geomorphology; dendrochronology

Stanton E. Tuller, Ph.D.  
(Calif., Los Angeles)

Physical: Climatology; heat balance; Japan

Colin J.B. Wood, Ph.D.  
(McMaster)

Resources: Cultural; economic; land



## GRADUATE COURSES

*All courses may not be offered in any one year.*

### **GEOG 500 (1½) COLLOQUIUM AND FIELD WORK IN GEOGRAPHY**

A seminar course based on presentations by a broad variety of guest speakers on topics of current interest to Geographers. Also includes a compulsory field camp, usually organized for the week before classes commence in the fall term. Students must enroll for 2 terms. (Required core course) **Y**

### **GEOG 522 (1½) RESEARCH DESIGN IN GEOGRAPHY**

This course introduces students to the purpose and practice of scholarly enquiry. It reviews a wide range of methodologies from phenomenology to systems analysis and the kinds of opportunities and challenges presented by each. Links are made between the historical roots of these approaches and current practice in geography. (Required core course) **F**

### **GEOG 523 (1½) RESEARCH METHODS: HUMAN GEOGRAPHY**

This course is a critical introduction to several research methods used in human geography. The strengths, weaknesses, and limitations of their use will be emphasized. Topics include sampling procedures; survey research; case study analysis; interpretative methods; observational methods; archival/documenting research; quasi-experiments. (Required core course for M.A. students) **S**

### **GEOG 524 (1½) MATHEMATICAL ANALYSES OF SPATIAL SYSTEMS**

Applications of multivariate statistics, spatial analysis and other mathematical programming techniques to investigate and solve spatial problems.

### **GEOG 525 (1½) RESEARCH METHODS: PHYSICAL GEOGRAPHY**

This course is intended to introduce the student to research techniques in physical geography. The course will consist of a series of lectures, seminars, and field trips and will culminate in the student preparing a detailed research design. The course will be taught by various faculty members and guest lecturers.

### **GEOG 526 (1½) THE NATURE AND PHILOSOPHY OF GEOGRAPHY**

The history of geography up to the 20th century will be examined, but the bulk of the course is concerned with the radical changes in geographical philosophies, methodologies, and approaches which have occurred since 1950. The nature of geography will be considered in relation to other disciplines and interdisciplines. Recommended for graduates who wish to place their specific research goals in the general context of the geographical research frontier.

### **GEOG 528 (1½) SEMINAR IN GEOGRAPHICAL INFORMATION SYSTEMS**

This course focuses on contemporary issues in the design and advancement of geographical information systems. Current research problems are identified and discussed in relation to cartography, spatial analysis and resource management. Students will use the Department's GIS facilities. Each student will prepare and present to the class a research paper. **S**

### **GEOG 529 (1½) REMOTE SENSING**

The course is intended to provide students with an insight into issues pertinent in Remote Sensing research. Theoretical topics will be addressed through class discussions. Specific application of remote sensing methodologies to environmental issues will be addressed through research projects and seminar presentations.

### **GEOG 552 (1½) SEMINAR IN RESOURCES MANAGEMENT PROBLEMS**

A seminar dealing with various problems encountered in resources management, including the collection and analysis of data, the organization of research, the formulation of plans and programs, and the analysis of economic and social aspects of resource development projects. Examples will be drawn from Canada and elsewhere. Seminars will be led by resource geography faculty. **F**

### **GEOG 554 (1½) ADVANCED TOPICS IN PARKS AND WILDERNESS MANAGEMENT**

The objective of this course is to pursue in depth critical and current management issues in parks and wilderness areas. Based on sound theoretical and conceptual constructs the course will entail investigation of the specific case studies. Organized largely as a seminar, the precise format will be determined by mutual agreement of class and instructor. A research paper will be required.

### **GEOG 555 (1½) PROBLEMS IN THE MANAGEMENT OF COASTAL AND MARINE RESOURCES**

A seminar on the problems of coastal and marine resources with special reference to Canada. Topics to be investigated may include coastal resource conflicts, fishery resources.

### **GEOG 556 (1½) SEMINAR IN ENVIRONMENTAL IMPACT ASSESSMENT**

A review of the philosophy, process and methods of environmental impact assessment. It will include specific discussions of the origins, approaches, techniques of measurement, and the political process of assessment. Economic, social, and various physical and environmental parameters will be taken into account. The course will conclude with the application of the various techniques to an actual case study. One or more field trips will be undertaken. It is probable that the course will be conducted as a joint enterprise with the Department of Biology.

### **GEOG 557 (1½) FOREST RESOURCE MANAGEMENT: PROBLEMS AND POTENTIAL**

A seminar based on both student and guest speaker presentations together with field excursions that selectively examine ecological, social and economic factors related to the management of forest resources in British Columbia. Each student will prepare one major paper for critical discussion.

### **GEOG 560 (1½) SEMINAR IN HUMAN GEOGRAPHY**

An examination of contemporary theoretical issues and competing research paradigms in human geography. Seminar theme will vary depending on faculty interests.

### **GEOG 571 (1½) SEMINAR IN PHYSICAL GEOGRAPHY**

The course will cover selected topics in physical geography and earth science such as biogeography, climatology, hydrology, geomorphology, sedimentology, soil science and remote sensing applications. Course content will vary annually depending on graduate and faculty research interests. Seminars, faculty and guest lectures, and individual research projects will be utilized.

### **GEOG 590 (A-Z) (1½) DIRECTED STUDIES IN GEOGRAPHY**

M.A. and M.Sc. students may only take one 590 course as part of their minimum program requirements. If they wish to take additional 590 courses these can be added to their minimum course load. Individual titles will be assigned to each numbered section of the course arranged by supervisory committees.

**GEOG 599 (credit to be determined, normally 10 units) M.A. THESIS**  
(Grading: INP, Com, N or F)

**GEOG 699 (credit to be determined, normally 24 units) PH.D. DISSERTATION**  
(Grading: INP, Com, N or F)



## GERMANIC STUDIES

The Department of Germanic Studies offers a program of studies leading to the degree of Master of Arts.

All candidates for the degree must meet all the general requirements of the Faculty of Graduate Studies, as well as the specific requirements of the Department of Germanic Studies. Admission to the program normally requires a Bachelor's Degree (Major in German) with a minimum overall average of B+ (6.00 G.P.A.), or a Bachelor's Degree (Major in German) with a minimum average of A- (7.00 G.P.A.) in the final year's work.

The M.A. Program in Germanic Studies shall consist of a minimum of fifteen (15) units of graduate credit:

- (a.) at least nine units of course work, three of which may be drawn from courses in German at the senior undergraduate level, and
- (b.) a thesis, worth six units of credit (in exceptional circumstances, a candidate may be allowed to write a thesis of nine unit value); there will be a final oral examination of the thesis.

Candidates are required to possess a reading knowledge of English, and must satisfy the Department that they have a working knowledge of a language other than German and English.

Work as a Research or Teaching Assistant is required by all graduate students and is considered essential for successful completion of the program.

### Faculty and Areas of Interest

|  |  |
|--|--|
| Angelika F. Arend, D.Phil.<br>(Oxford) | Lyric poetry, women's literature, G. Benn, early 19th century literature             |
| Peter Götz, Ph.D.<br>(Queen's)         | Contemporary Germanic literatures, women's literature, literary theory, Adolf Muschg |
| Michael Hadley, Ph.D.<br>(Queens)      | 18th century literature, enlightenment, naval history, war literature                |

Peter G. Liddell, Ph.D.  
(British Columbia)

Walter E. Riedel, Ph.D.  
(McGill)

Rodney T.K. Symington, Ph.D.  
(McGill)

19th-Century realism; prose; GDR literature; theory and prose; history of language; Germans in B.C.

20th century literature, German-Canadian literature, literary relations: Germany and Canada

Modern literature, Brecht, Th. Mann, Doderer, German-Canadian literature

### GRADUATE COURSES AND SEMINARS

NOTE: A selection of the following courses will be offered. Students should consult the Department concerning specific content of the courses offered in any given year.

|  |                             |
|--|-----------------------------|
| GER 501 (1½) INTRODUCTION TO BIBLIOGRAPHY, METHODS OF RESEARCH, AND THEORY OF LITERARY CRITICISM | S(3-0)                      |
| GER 510 (1½) STUDIES IN MEDIEVAL LITERATURE  |                             |
| GER 520 (1½) STUDIES IN 17th CENTURY LITERATURE  |                             |
| GER 530 (1½) STUDIES IN 18th CENTURY LITERATURE  | F                           |
| GER 540 (1½) STUDIES IN 19th CENTURY LITERATURE  | (3-0)                       |
| GER 550 (1½) STUDIES IN 20th CENTURY LITERATURE: I   | S(3-0)                      |
| GER 551 (1½) STUDIES IN 20th CENTURY LITERATURE: II  | S(3-0)                      |
| GER 560 (1½) GERMAN-CANADIAN STUDIES   |                             |
| GER 590 (1½) DIRECTED STUDIES: I   |                             |
| GER 591 (1½ or 3) DIRECTED STUDIES: II   |                             |
| GER 599 (6-9) THESIS   | (Grading: INP, COM, N or F) |

## HISTORY

### Doctor of Philosophy:

- 1) Requirement for Admission: normally a Master's degree with a minimum average of A- in graduate courses.
- 2) Residence Requirement: "A student proceeding to the degree of Doctor of Philosophy must register at the University of Victoria and pursue studies under the direction of a faculty member as a full time student for at least two Winter Sessions, except that a student entering the Doctoral program with a Master's degree may have this residence requirement reduced to one Winter Session." (5.3 Graduate Studies Regulations)
- 3) The Ph.D. programme will normally require one year of course work beyond the Master's Degree and reading for three comprehensive fields. The fields will be examined by a combination of written and oral evaluations.
- 4) Theses may be written in Canadian history with emphasis on the west, north, British Columbia, native peoples, military and business history; in British history with an emphasis on political, social and cultural themes; other areas, including western European history, will be considered on an individual basis. A wide range of geographic and thematic secondary fields are available.
- 5) Course Requirements: the equivalent of nine units of graduate courses including History 500. A student who has completed History 500 or its equivalent may be excused from History 500. Each student will take two three-unit Field Courses. The Field Courses are designed to cover major historiographical issues over a broad chronological period, within the various geographical areas: Canadian, British, American, European and Asian. In one of the Field Courses, normally the one covering the area of major geographical interest, a twenty-five to thirty page paper based on primary research will be required. The second course will be a reading Field in the area of the student's second area of interest. An historiographic paper of twenty to twenty-five pages will be required, although with the

instructor's permission a student may opt to write a paper based on primary sources. Both Field Courses help prepare students for the field examinations.

Each student will also take a one and a half unit Topical Field course examining secondary literature on a significant theme such as social, military, intellectual/cultural, women's, native, world, maritime or business history. The course will cover various geographical areas and chronological periods and will relate to the student's third area, that is, the particular theme to be pursued in the Ph.D. thesis. In appropriate cases students may take a Topical Field through a directed studies programme under the supervision of faculty outside the discipline of history.

- 6) The Field Courses will help prepare students for the comprehensive written and oral examinations. Field coverage will be broader than the course work and will be determined by the student and his/her advisors.
- 7) Before proceeding to the field examinations the student must pass all course work with at least a B+ average. A student may repeat field examinations one time only.
- 8) There will be a reading examination to determine the students' proficiency in a second language normally relevant to the student's research interest. A student may not present a thesis for oral defence before passing the language requirement.
- 9) In certain cases, requirements in addition to those already mentioned may be called for. The student and the student's supervisory committee will work out these requirements.

|                  |                      |    |
|------------------|----------------------|----|
| 10) Unit Values: | HISTORY 500          | 1½ |
|                  | FIELD COURSE         | 3  |
|                  | FIELD COURSE         | 3  |
|                  | TOPICAL FIELD COURSE | 1½ |
|                  | THESIS               | 30 |
|                  | TOTAL                | 39 |



**Master of Arts:**

Subject to the admission requirements of the Faculty of Graduate Studies, admission to the M.A. program normally requires a Bachelor's degree with a minimum overall average of B+ (6.00 G.P.A.), or a Bachelor's degree with a minimum average of A- (7.00 G.P.A.) in the final year's work. A candidate with background deficiencies in history may be required to register for a year as a non-degree undergraduate student before being admitted to the M.A. programme.

Students are required to complete 6 units of course work. All students will take History 500. They must complete an additional 4½ units comprised of 1½ or 3 units of field courses in a geographical area relating to the student's thesis topic and 1½ or 3 units of topical field courses. At least 1½ units must treat a geographical area outside that covered in the thesis. The thesis length must be between 70 and 120 typed pages.

Facilities are available for thesis work in Canadian history (particularly British Columbia, Western Canadian and Canadian business and Canadian military history), and some topics in other areas, such as intellectual, diplomatic, British, European and Western American history. The University's McPherson Library has holdings in excess of one million volumes, and graduate students may also be granted access to the Provincial Library and Archives, which include notable manuscript collections relating to western Canada and the northwestern United States.

**Unit Values:**

| (1)                  |           | (2)                   |           |
|----------------------|-----------|-----------------------|-----------|
| HISTORY 500          | 1½        | HISTORY 500           | 1½        |
| Field Courses        | 3         | Field Course          | 1½        |
| Topical Field Course | 1½        | Topical Field Courses | 3         |
| Thesis               | 9         | Thesis                | 9         |
| <b>TOTAL</b>         | <b>15</b> |                       | <b>15</b> |

**General:**

All candidates for the M.A. degree must demonstrate a reading knowledge of a second language acceptable to the Department in order to qualify for graduation. The level of proficiency expected will be equivalent to a B or better in the reading courses (such as German 390 or equivalent) offered by the respective language departments. Examinations will normally be of two hours duration and may be written with the aid of a dictionary. They will normally be administered three times a year — in September or October, March and July. New students are strongly urged to take their language examination in the fall, an examination usually scheduled for the first week of the term in order that, if necessary, students may enroll in a language course. Should a student fail a language examination, the Department may require that the student take formal language instruction before writing another examination.

NOTE: students will not be permitted to sit their oral examinations until they have satisfied this language requirement.

Students who obtain a 5.00 grade point average but who obtain less than B standing in History 500 must repeat History 500. They may repeat History 500 once only.

Part-time study is permitted, but the degree must be completed within five years of the initial registration.

Although there are no formal residence requirements, residence is recommended.

**Faculty and Major Fields of Interest**

|   |  |
|---|--|
| Robert S. Alexander, Ph.D.<br>(Cambridge)                   | Early Modern and Modern France.                        |
| Peter A. Baskerville, Ph.D.<br>(Queen's)                    | Business history; pre-Confederation Canada             |
| A. Perry Biddiscombe, Ph.D.<br>(London School of Economics) | Modern Europe; nationalism                             |
| Gregory R. Blue, Ph.D.<br>(Cambridge)                       | World history; intellectual/cultural history           |
| Harold G. Coward, Ph.D.<br>(McMaster)                       | Indian intellectual history; history of religions      |
| Ralph C. Croizier, Ph.D.<br>(Calif., Berkeley)              | Modern China, art history                              |
| Brian W. Dippie, Ph.D.<br>(Texas)                           | Intellectual-cultural; 19th century U.S. American West |

M.L. (Mariel) Grant, D.Phil.  
(Oxford)

Timothy S. Haskett, Ph.D.  
(Toronto)

G.R. Ian MacPherson, Ph.D.  
(Western Ontario)

Lynne S. Marks, Ph.D.  
(York)

Robert J. McCue, Ph.D.  
(Brigham Young)

Angus G. McLaren, Ph.D.  
(Harvard)

John Money, Ph.D.  
(Cambridge)

M. Michèle Mulchahey, Ph.D.  
(Toronto)

Patricia E. Roy, Ph.D.  
(British Columbia)

Eric W. Sager, Ph.D.  
(British Columbia)

Thomas J. Saunders, Ph.D.  
(Toronto)

Donald L. Senese, Ph.D.  
(Harvard)

Phyllis M. Senese, Ph.D.  
(York)

E. Patricia Tsurumi, Ph.D.  
(Harvard)

Elizabeth Vibert, D.Phil.  
(Oxford)

Paul B. Wood, Ph.D.  
(Leeds)

Wesley T. Wooley, Ph.D.  
(Chicago)

David Wootton, Ph.D.  
(Cambridge)

David Zimmerman, Ph.D.  
(New Brunswick)

20th century Britain

Medieval Social and Legal History, Medieval England

Post-Confederation Canada; agrarian; cooperative history

Canadian women's history; religious and social history

Sixteenth Century Europe

19th century European social history

18th century Britain

Religious, Intellectual and Cultural History of the Middle Ages; Medieval Italy

Post-Confederation Canada, British Columbia

Atlantic Canada, social and economic history

Modern Germany; 20th century European culture-ideas

19th and 20th century Russia

French Canada, women's studies, Post-Confederation Canada

Modern Japan, women's studies

Aboriginals (Canadian and comparative)

Early Modern Science; The Enlightenment

U.S. diplomatic and political history, 20th century U.S.

Early Modern Intellectual History

Military and naval history; Canadian science and technology

**GRADUATE COURSES**

Not all the following courses will be offered in a particular year. All courses are variable content. With Departmental permission, History 501 to History 590 may be taken more than once. Students should consult the Department concerning specific content of the courses offered in any given year.

**HIST 500 (1½) HISTORIOGRAPHY****HIST 501A (1½) FIELD IN AMERICAN HISTORY I****HIST 501B (1½) FIELD IN AMERICAN HISTORY II****HIST 502A (1½) FIELD IN BRITISH HISTORY I****HIST 502B (1½) FIELD IN BRITISH HISTORY II****HIST 503A (1½) FIELD IN CANADIAN HISTORY I****HIST 503B (1½) FIELD IN CANADIAN HISTORY II****HIST 504A (1½) FIELD IN EUROPEAN HISTORY I****HIST 504B (1½) FIELD IN EUROPEAN HISTORY II****HIST 508A (1½) FIELD IN CHINESE HISTORY I****HIST 508B (1½) FIELD IN CHINESE HISTORY II****HIST 509A (1½) FIELD IN JAPANESE HISTORY I****HIST 509B (1½) FIELD IN JAPANESE HISTORY II**



**HIST 510 (1½) TOPICAL FIELD IN SOCIAL HISTORY****HIST 511 (1½) TOPICAL FIELD IN MILITARY HISTORY****HIST 512 (1½) TOPICAL FIELD IN INTELLECTUAL/CULTURAL HISTORY****HIST 513 (1½) TOPICAL FIELD IN WOMEN'S HISTORY****HIST 514 (1½) TOPICAL FIELD IN WORLD HISTORY****HIST 515 (1½) TOPICAL FIELD IN BUSINESS HISTORY****HIST 516 (1½) TOPICAL FIELD IN COMPUTERS AND HISTORY****HIST 517 (1½) TOPICAL FIELD IN NATIVE HISTORY****HIST 518 (1½) TOPICAL FIELD IN POLITICAL HISTORY****HIST 519 (1½) TOPICAL FIELD IN SPECIAL TOPICS****HIST 520 (1½) TOPICAL FIELD IN LABOUR HISTORY****HIST 521 (1½) TOPICAL FIELD IN LEGAL HISTORY****HIST 522 (1½) TOPICAL FIELD IN RELIGIOUS HISTORY****HIST 523 (1½) TOPICAL FIELD IN HISTORY OF SCIENCE/TECHNOLOGY****HIST 524 (1½) TOPICAL FIELD IN RURAL HISTORY****HIST 525 (1½) TOPICAL FIELD IN CO-OPERATIVE HISTORY****HIST 590 (1½ or 3) DIRECTED READING****HIST 597 (3) COMPREHENSIVE ORAL EXAMINATION**

(Not available to new students registering after 1993)

(Grading: INC, COM, N or F)

**HIST 598 (4½) EXTENDED RESEARCH PAPER**

(Not available to new students registering after 1993)

(Grading: INC, COM, N or F)

**HIST 599 (9-10½) M.A. THESIS**

(Grading: INC, COM, N or F)

**HIST 699 (30) PH.D. THESIS**

(Grading: INC, COM, N or F)

## HISTORY IN ART

The Department of History in Art offers programs of graduate study leading to the degrees of Master of Arts and Doctor of Philosophy. The program for each student is determined by the student's supervisory committee in consultation with the student, and is intended to meet the student's specific academic needs while at the same time maintaining some breadth of exposure to a wide range of art historical topics and methodologies. The Department also participates in the Cooperative Education program, and students who are interested in the possibility of gaining discipline-related work experience while they pursue their degree are invited to contact the Department's graduate adviser.

The M.A. program consists of a minimum of 18 units, comprising 9 units of coursework and a 9 unit thesis (HA 599). The coursework will normally comprise five graduate seminars in the Department, and a sixth course (within the Department or outside it) to be selected in consultation with the Department's graduate advisor. All students are required to take at least two graduate seminars (1.5 units each) in non-western topics. Applicants for the M.A. program should have a significant academic background in the history of art, either through a major or honours degree in the history of art or a closely related field, or, if their degree is in some other discipline, through substantial coursework in the history of art. A student who does not have sufficient coursework in the history of art may be asked to complete a full year of additional coursework at the senior undergraduate level before their application to the graduate program will be considered. All M.A. students will be required to demonstrate a reading knowledge of one language other than English which is appropriate to their area of study, and will not be permitted to sit their oral examination until this requirement has been satisfied. Many students will need to take language courses in addition to the courses required for the M.A. degree.

The Ph.D. program consists of a minimum of 45 units, comprising 6 units of graduate seminars, 9 units of directed studies, the Comprehensive Examination (HA 695), the Candidacy Examination (HA 697), and a 30 unit dissertation (HA 699). Applicants for the Ph.D. program should have a Master's degree in the history of art or a closely related field from a recognized university, and demonstrate that they are capable of undertaking advanced research. (This capability will be judged on the basis of a Master's thesis or other scholarly work, including publications, as well as from letters of reference from qualified referees.) Ph.D. candidates will be required to demonstrate a good reading knowledge of at least two languages other than English which are appropriate to their area of study. In addition, they will be required to demonstrate a working knowledge of any additional languages which may be deemed by their supervisory committee to be essential for the successful completion of the dissertation. The oral examination for the dissertation may not take place until all language requirements have been satisfied. Substantial fieldwork is expected of all Ph.D. candidates.

### Faculty and Research Interests

Carol Gibson-Wood, Ph.D.  
(London)

European art of the 17th and 18th centuries; Western art theory, criticism and historiography

Catherine Harding, Ph.D.  
(London)

Early Italian Renaissance art history

Kathlyn Liscomb, Ph.D.  
(Chicago)

Chinese art, art theory, and art historiography

Lianne M. McLarty, Ph.D.  
(Simon Fraser)

Feminist film criticism, critical theory, popular culture

Nancy Micklewright, Ph.D.  
(Pennsylvania)

Late Islamic Art, History of Photography

John L. Osborne, Ph.D.  
(London)

Material culture of medieval Europe and Byzantium

Christopher A. Thomas, Ph.D.  
(Yale)

Canadian art and architecture, modern architecture

Elizabeth Tumasonis, Ph.D.  
(Berkeley)

European and North American art and architecture of the 19th and 20th centuries

S. Anthony Welch, Ph.D.  
(Harvard)

Islamic art and architecture; Iranian painting; architecture of Muslim India

Astri Wright, Ph.D.  
(Cornell)

Southeast Asian art and architecture, historical and modern periods

Victoria Wyatt, Ph.D.  
(Yale)

North American Native arts and ethnohistorical photographs

### Special Application Procedure

Complete applications must be received by Graduate Admissions by January 15 in order to be processed in time for the Department to make its decisions in spring regarding admissions and nominations for fellowships for the next academic year. Send a transcript for your fall courses directly to the Department as soon as your grades are available for those courses completed in the fall.

As part of the requirements of the M.A. and Ph.D. programs of the Department of History in Art, all applicants must submit a brief statement of the reasons for their interest in a career in art history.



## GRADUATE COURSES

Only a selection of the seminars (HA 501-580) will be offered in any particular year. All seminar courses and directed studies may be taken more than once, in different topics.

|   |         |
|---|---------|
| HA 501 (1½) SEMINAR IN METHODOLOGY                | NO(3-0) |
| HA 502 (1½) SPECIAL TOPICS IN THE HISTORY OF ART  | F(3-0)  |
| HA 520 (1½) SEMINAR IN MEDIEVAL ART               | F(3-0)  |
| HA 530 (1½) SEMINAR IN SOUTH/SOUTH-EAST ASIAN ART | NO(3-0) |
| HA 540 (1½) SEMINAR IN RENAISSANCE ART            | NO(3-0) |
| HA 545 (1½) SEMINAR IN BAROQUE/18th CENTURY ART   | NO(3-0) |
| HA 550 (1½) SEMINAR IN ISLAMIC ART                | NO(3-0) |
| HA 555 (1½) SEMINAR IN CANADIAN ART               | NO(3-0) |

|  |                             |
|--|-----------------------------|
| HA 560 (1½) SEMINAR IN MODERN ART: I               | F(3-0)                      |
| HA 561 (1½) SEMINAR IN MODERN ART: II              | NO(3-0)                     |
| HA 565 (1½) SEMINAR IN NATIVE NORTH AMERICAN ARTS  | S(3-0)                      |
| HA 570 (1½) SEMINAR IN EAST ASIAN ART              | S(3-0)                      |
| HA 580 (1½) TOPICS IN CULTURAL RESOURCE MANAGEMENT | NO(3-0)                     |
| HA 590 (1½) DIRECTED STUDIES (M.A. Level)          |                             |
| HA 599 (9) M.A. THESIS                             | (Grading: INP, COM, N or F) |
| HA 690 (1½-6) DIRECTED STUDIES (Ph.D. level)       |                             |
| HA 695 (0) COMPREHENSIVE EXAMINATION               | (Grading: INP, COM, N or F) |
| HA 697 (0) CANDIDACY EXAMINATION                   | (Grading: COM, N or F)      |
| HA 699 (30) Ph.D. DISSERTATION                     | (Grading: INP, COM, N or F) |

## HUMAN AND SOCIAL DEVELOPMENT MULTIDISCIPLINARY MASTERS

### Multidisciplinary Masters in Policy and Practice in Health and Social Services

The Schools of Child and Youth Care, Nursing and Social Work, in the Faculty of Human and Social Development, offer a course of study leading to the degree of Masters of Arts for child and youth care students, Master of Nursing or Master of Arts for nursing students, or Master of Social Work for social work students\*, in Policy and Practice in Health and Social Services.

For the Master of Nursing degree, students will normally:

- Have a member from the School of Nursing on their thesis committee.
- Select a thesis topic relevant to nursing.
- Take 3 units of graduate work from HSD 530 and 531, or nursing related course.

The purpose of the multidisciplinary graduate program is to prepare graduates from the professions of child and youth care, nursing, and social work to contribute to the improvement of policy and practice in health and social services. The program provides a unique opportunity for experienced professional nurses, child and youth care practitioners, and social workers to reflect on and analyze current issues and problems both in their professions and in two service fields, specifically, children and families, and the elderly. The program aims to attract intellectually curious professionals who have a commitment to improving public policies and professional practice.

The curriculum addresses the impact of policy, organizational and professional factors on practice; builds skills in research methods and inquiry; and presents information about the knowledge, theory, policy and practice in two fields of service.

All courses and the thesis focus on developing the qualities of reflection, analysis, and curiosity in examining problems. The ability to propose and communicate clear and flexible solutions to these problems will be of paramount importance.

This program admits limited numbers of part-time students. Normally, these students must follow a predefined sequence of courses as determined by the student and the graduate adviser. These students must complete program requirements within 5 years of admission to the program.

\*The MSW Degree Program has accreditation candidacy status with the Canadian Association of Schools of Social Work. This provides accredited status to the MSW degrees provided through the program.

### Admission Requirements

In addition to transcripts, letters of recommendation, and application forms required by the Faculty of Graduate Studies, the Faculty of Human and Social Development Multidisciplinary Master's Program requires applicants to have or to make up a background knowledge of Canadian government and policy, research methods and statistics.

Child and Youth Care applicants must have a B.A. in Child and Youth Care or Bachelor's degree in social sciences. Nursing applicants normally must have a B.Sc.N. or B.N., and Social Work applicants must have a B.S.W.

Normally, a B+ average (6.00 G.P.A.) for the last two years of university work is a minimum requirement for admission to the program. In addition, all applicants must normally have two years post-baccalaureate relevant professional experience.

### Applications

Initial inquiries regarding graduate studies in Policy and Practice in Health and Social Services should be addressed to the Graduate Adviser, Faculty of Human and Social Development. Application forms may be obtained from the office of the Dean of Graduate Studies.

The closing date for application is January 31st. Completed applications and supporting documents must be available for consideration by the Schools and Faculty on, or prior to, that date.

### Program of Studies

The Master's Program consists of a minimum of 21.0 units which includes core courses, the choice between courses in aging or childhood and family, elective courses (4.5 units), and a thesis (HSD 599). The Master's thesis must be defended at a final oral examination.

## HSD GRADUATE PROGRAM STRUCTURE

### Term 1 — Fall

- Policy Context of Practice in Health and Social Services (1½)
- Organizational Context of Practice in Health and Social Services (1½)
- Research I: Knowledge & Inquiry in Health & Social Services (1½)
- Knowledge & Theory of Aging (1½)
- OR
- Knowledge and Theory of Childhood & Family (1½)

### Term 2 — Spring

- Putting Policy into Practice (3)
- Elective (1½ or 3)
- Research II: Research Methods in Health & Social Services (1½)

### Term 3 — Summer

- Putting Policy into Practice (cont'd)
- Elective (1½ or 3)

### Thesis (6)

### Electives

- Promoting Professional and Community Learning
- Ethical Behaviour in Professional Practice
- Special Topics in Nursing
- Professional Issues and Theories in Nursing and Health Care
- Special Topics in Child and Youth Care
- Advanced Program Design
- Advanced Assessment with Children and Families



**Faculty and Fields of Interest**

- Marie Campbell, Ph.D.  
(Toronto) Organizational analysis, women's work, social organization of knowledge
- Michael J. Prince, Ph.D.  
(Exeter) Retirement income policy, public policy formation and implementation, public budgeting and resource allocation
- Deborah Rutman, Ph.D.  
(Toronto) Family and child well-being and services; community development and social planning; caregiving; adult capacity/guardianship issues
- Brian Wharf, Ph.D.  
(Brandeis) Connecting policy and practice, child welfare and community organization

**Child and Youth Care**

- James P. Anglin, M.S.W.  
(British Columbia) Parent education and family support, qualitative research methods, professionalisation of child and youth care
- Gordon Barnes, Ph.D.  
(York) Personality and alcohol use/abuse
- Philip Cook, Ph.D.  
(Queen's) Cross-cultural child and youth care; child and youth care in developing countries; native child and youth care; the UN Convocation on the Rights of the Child; community based children's health
- Roy V. Ferguson, Ph.D.  
(Alberta) Children's health, hospitalised children, children with asthma; environmental design, environment and behaviour, hospital design; developmental disability, quality of life, psychological coping mechanisms
- Valerie S. Kuehne, Ph.D.  
(Northwestern) Intergenerational relationships, human development across the life course, family and community relations
- Alan R. Pence, Ph.D.  
(Oregon) Child day care and related developmental and policy issues; work and family issues, native child and youth care
- Frances A.S. Ricks, Ph.D.  
(York) Programme evaluation, family systems and family therapy, women's studies/issues of gender difference, cooperative education

**Nursing**

- Carolyn Attridge, Ph.D.  
(Toronto) Women in women's work, professional socialization, distance education; evaluation
- Howard Brunt, Ph.D.  
(Calgary) Chronic illness risk factors, survey methods, health promotion evaluation
- Isobel Dawson, Ph.D.  
(Toronto) Health promotion-education, health care delivery, programme planning-implementation and evaluation
- Elaine Gallagher, Ph.D.  
(Simon Fraser) Health of older persons, evaluation research, social support/stress
- Gweneth A. Hartrick, Ph.D.  
(Victoria) Family and women's health; health promotion; nursing practice education; health psychology; family counselling

Martha J. Haylor, Ph.D.  
(Oregon Health Sciences)

Marcia Hills, Ph.D.  
(Victoria)

Marilyn Jackson, M.Ed.  
(Toronto)

A. Elizabeth Lindsey, Ph.D.  
(Victoria)

Anita Molzahn, Ph.D.  
(Alberta)

Mary Ellen Purkis, Ph.D.  
(Edinburgh)

Laurene Shields, M.S.  
(Oregon)

**Social Work**

Andrew Armitage, Ph.D.  
(Bristol)

Marilyn Callahan, Ph.D.  
(Bristol)

John Cossom, M.S.W.  
(Toronto)

Andy Farquharson, Ed.D.  
(Toronto)

Elizabeth Pittaway, D.S.W.  
(Wilfrid Laurier)

Barbara Whittington, M.S.W.  
(British Columbia)

Family caring; children with developmental disabilities; phenomenology; nursing education

Health promotion, curriculum development, family counselling

Health of hospitalized older persons, chronic illness, baccalaureate education for R.N.s

Community health nursing; health promotion; chronic health challenges

Social psychology of health and illness; quality of life

Social accomplishment of nursing practice; effects of contemporary health care discourses (health promotion and self care) on nurses' practices; ethnography and discourse analysis

Health promotion; women's health

Family policy, social policy towards aboriginal peoples, social service administration

Child welfare, employment equity, gender discrimination

Practice ethics, social work education, generalist social work practice

Social work practice, adult education, self-help groups, teaching/learning strategies

Gerontology: Social support, leisure lifestyles, supportive housing, elder abuse, Alzheimer's

Family practice, sexual harassment, mediation

**GRADUATE COURSES**

Not all the elective courses will be offered in a particular year. Students should consult the Graduate Adviser to determine the courses which will be offered this year.

**HSD 500 (1½) POLICY CONTEXT OF PRACTICE IN HEALTH AND SOCIAL SERVICES**

This course will examine the main concepts and theories of policy and decision-making. Perspectives to be considered include feminist, pluralist, social class and rationalist theories. Students will learn about health and social policy of different types, at various institutional levels, and stages of the policy process; examine how policies interact and impact on the public; and analyze emerging issues to discover how policy development is influenced.

**HSD 501 (1½) ORGANIZATIONAL CONTEXT OF PRACTICE OF HEALTH AND SOCIAL SERVICES**

This course presents the conceptual and theoretical foundations for understanding the organization of professional work, organizational change, and the organization of ethical practice. Students will reflect on their own work experiences to develop a critical methodological approach to the investigation of organizational practices, e.g. document-based management, intra-organizational relations, and fiscal accountability.



**HSD 502A (1½) RESEARCH I: KNOWLEDGE AND INQUIRY IN HEALTH AND SOCIAL SERVICES**

This course will explore assumptions underlying the creation of scientific knowledge and different approaches to knowing authoritatively. Issues related to conducting research in a variety of health and social service settings will be discussed. The course proposes and teaches an experience-based approach to critical thinking and to developing research questions.

**HSD 502B (1½) RESEARCH II: RESEARCH METHODS IN HEALTH AND SOCIAL SERVICES**

On the basis of professional knowledge and previous research preparation, this course will focus on designing research studies related to students' interests and experience. Students will define a research project, gather background information, develop a conceptual framework for investigating a topic, examine appropriate methodologies for data collection and data analysis, and explore effective ways to apply research findings.

**HSD 503 (1½) PROMOTING PROFESSIONAL AND COMMUNITY LEARNING**

This course explores factors which influence learning within the organization and the community and which empower learners, and lead to personal, professional and community growth and development. Learners will examine their perspectives on teaching and learning through reflection on their own and others' experiences, the literature and research.

**HSD 504 (1½) ETHICAL BEHAVIOUR IN PROFESSIONAL PRACTICE**

This course will address theoretical foundations for ethics and moral thinking, with an emphasis on application to professional practice. Also examined will be codes of ethics, standards of practice, and the impact of the organizational context on professional behaviour.

**HSD 505 (1½) KNOWLEDGE AND THEORY OF AGING**

This course examines the process of aging from a holistic perspective incorporating sociological, psychological, physical and spiritual perspectives. Students will be introduced to concepts, theories and diverse methods of inquiry for understanding aging.

**HSD 506 (1½) KNOWLEDGE AND THEORY OF CHILDHOOD AND FAMILY**

The course examines current theories (such as developmental, ecological/systems and critical) and the implications of theory for the development of practice, policy and research. A personal understanding of theoretical preferences and the importance of the practitioner and policy maker as theorist is encouraged.

**HSD 509A (formerly half of FHSD 509) (1½) PUTTING POLICY INTO PRACTICE I**

This course begins to examine the ways in which front line professionals and clients can participate in the policy making process and the management of human service agencies. The course will focus on the analysis of the policy/practice interface in order to determine how policy both enhances and constrains practice and how practice can, in turn, influence policy. Particular attention will be paid to the implementation stage of the policy process as the connecting stage between policy and practice. Implementation issues will be considered within organizations and on the interorganizational/community scene. (*Prerequisite:* HSD 500 and HSD 501)

**HSD 509B (formerly half of FHSD 509) (1½) PUTTING POLICY INTO PRACTICE II**

This course continues to examine the roles front line professionals and clients can play in the policy process and service agency management. The focus here will be on approaches to changing policy and practice. Strategies for change both from within organizations (e.g. quality of worklife movements, participative management approaches, program evaluation) and outside the organization (e.g. social movements, lobby groups) will be examined. Students will be expected to share their experiences with the policy/practice interface and in bringing about change. (*Prerequisite:* HSD 509A)

**HSD 520 (1½ or 3) SPECIAL TOPICS IN CHILD AND YOUTH CARE PROFESSIONAL PRACTICE**

A graduate seminar that explores topics of special interest to the field of Child and Youth Care. Seminar topics will vary and will take advantage of specialists and visiting scholars. The course allows for direct work in the student's area of interest. The course may be taken more than once for credit if the content is different.

**HSD 521 (1½) ADVANCED PROGRAM DESIGN**

This course develops skills in designing programs with children, families, seniors, and communities. Program development is considered in light of contemporary issues in human development, current program policy, and the dynamics of local communities. Special focus is on skill development in designing programs which are congruent in philosophy, design, therapeutic interventions and activities, and community development philosophy and strategies.

**HSD 522 (1½) ADVANCED ASSESSMENT WITH CHILDREN AND FAMILIES**

The course develops skills in the assessment of children, youth, and families. Current assessment perspectives in Child and Youth Care are introduced and analyzed in terms of their respective strengths and limitations, effects on clients, and implications for professional practice. Issues and common problems of assessment are confronted and addressed, and the use of assessments for program planning is discussed. (Enrolment is subject to the approval of the instructor)

**HSD 530 (1½ or 3) SPECIAL TOPICS IN NURSING**

This is a variable content course. Students will be permitted to take it more than once for credit, providing the course content is different from that taken previously.

**HSD 531 (1½) PROFESSIONAL ISSUES AND THEORIES IN NURSING AND HEALTH CARE**

This course focuses on current issues identified by students, and theoretical perspectives related to nursing and health care. Topics such as the move to community-based health care, and theory development in nursing and health will be examined in a seminar format.

**HSD 540 (1½) COMMUNITY DEVELOPMENT IN HEALTH AND SOCIAL SERVICES**

The intent of this course is to analyze critically some approaches to community development and their application to current policy and practice initiatives in the human services, such as health promotion, social development and aboriginal self-government. Multidisciplinary perspectives on community development will be explored.

**HSD 541 (1½ or 3) SPECIAL TOPICS IN SOCIAL WORK**

This course will critically analyze current issues, practice themes and research directions which may be of special interest to members of the social work profession. Students will be permitted to take the course more than once for credit providing the content is different.

**HSD 590 (1½-3) DIRECTED STUDIES**

Individual studies under the direct supervision of one or more faculty members. The content, credit value, and method of evaluation must be approved by the instructor and the Graduate Advisor prior to registering in this course. May be taken more than once, so long as course content is different from that previously taken.

**HSD 599 (6) THESIS**

The thesis will entail specialized research on a topic area chosen in consultation with the student's supervisory committee. In their thesis students will investigate, analyze and propose solutions to pressing problems in their profession either in the field of aging and the elderly or the field of children, youth and families. The thesis will represent the application of research skills to current issues, and fulfills the same purpose as a practicum in clinical programs.

(Grading: INP, COM, N or F)



## LINGUISTICS

The Department of Linguistics offers programs of study and research leading to the degrees of Doctor of Philosophy and Master of Arts in the following areas:

1. Theoretical Linguistics, especially as this applies to grammatical theory, phonological theory, experimental phonetics, psycholinguistics.
2. Applied Linguistics, especially as this applies to Canadian English, dialectology, sociolinguistics, English for non-native speakers, languages of the Pacific Rim, and indigenous languages of the Northwest.

Applicants from other than Canadian universities must arrange to take the G.R.E. (Graduate Record Examination) and submit the results to the Faculty of Graduate Studies together with their application forms. Applicants whose native language is not English should consult the regulations concerning the Test of English as a Foreign Language (TOEFL) under Faculty of Graduate Studies regulation 1.1. The Department of Linguistics requires a minimum score of 580 on the TOEFL. Although it is possible to enter the program at any entry point listed in Section 1.0 of the general regulations, September entry is advised as many of the courses listed for the Spring term have prerequisite courses given only in the Fall. Graduate courses are seldom offered in the Summer session.

### MASTER OF ARTS

The Department offers a choice of two programs of equal status leading to the Master's degree: course work and thesis, or course work only.

#### Requirements for Admission:

Admission to either program requires a Bachelor's degree, preferably in Linguistics, with a minimum overall average of B+ in the final year's work. A candidate with insufficient preparation in Linguistics will be required to register for a year as an unclassified undergraduate student before being considered for admission to a degree program.

#### Course Requirements:

1. *All Master's Students:* For either option, a minimum of 24 units of credit is required to complete the degree. Students lacking senior course work in syntax and/or phonology are required to make up this deficiency by having 410B and/or 441 added to their program, for a total of 25.5 or 27 units. (Students without the prerequisites to these courses will also be required to complete 410A and/or 440 without graduate credit.) All students must complete 503, 505, and either 527 or 528; those intending to continue on to a Doctoral program should also complete 508 and 510.
2. *Thesis Option:* The program must include 581. The thesis (599) is typically awarded 9 units of credit. Students must defend their thesis orally as part of the program requirements (see Section 5.9 of the general Graduate Studies Regulations).
3. *Non-thesis Option:* The program must include 597. At the conclusion of their program, students enrolled in this course will be examined orally on at least two previous substantial research papers or their equivalent; the oral examination may also include other aspects of the students' course of study and the discipline of Linguistics.

#### Language Requirement:

**Ph.D. Students:** The Departmental language requirement for Ph.D. students is intended to prepare students for linguistic research by ensuring that students (i) have the ability to read linguistic literature in a language other than English as appropriate to their area of research, and (ii) have an appreciation for and an understanding of the variety of linguistic systems found in the world.

The first part of the requirement will be satisfied by reading proficiency in French, German, Russian, or other language which suits the research topic. The second part of the requirement will be satisfied by proficiency for research purposes in a language significantly different in structure from the Germanic and Romance roots of English. The two parts of the language requirement may not be satisfied by the same language.

**M.A. Students:** For the purpose of doing linguistic research, Master's students must satisfy either part (i) or part (ii) of the language requirement for Ph.D. students which is spelled out above. For Master's students going on to the Ph.D. at the University of Victoria, the Master's requirement will satisfy one part of the Ph.D. requirement.

### DOCTOR OF PHILOSOPHY

The Department also offers a program leading to the Ph.D. degree in Linguistics. The requirements for this program are as follows:

#### Requirements for Admission:

Students will normally hold a Master's degree in Linguistics. See also Faculty of Graduate Studies regulations, Sections 1.5 and 5.1.

#### Course Requirements:

Students are required to take 30 units of credit (including their dissertation) beyond the M.A. degree (see Faculty of Graduate Studies regulations, Section 5.1.1). Students must have completed 508 and 510 or their equivalents. Apart from 699 (dissertation), at least 9 units of credit shall be taken from courses at the 600 level.

#### Residency Requirements:

See Faculty of Graduate Studies regulations, Section 5.3.

#### Comprehensive Examination for Candidacy:

The comprehensive requirement must be satisfied within two years of registration in the doctoral program (see Faculty of Graduate Studies regulations, Section 5.6). The comprehensive examination consists of two substantial, original research papers in the areas of phonological and syntactic theory. These papers typically originate in work undertaken in 601, 602 or 603; if 603 is chosen, its focus may not be the same as that of the other paper.

#### Dissertation:

After attaining candidacy, students will present and defend a dissertation proposal typically developed in 690. The dissertation is normally awarded 15 units of credit. Students must defend their dissertation orally as part of program requirements (see Section 5.9 of the general graduate Studies regulations).

#### Faculty and Areas of Interest

|  |  |
|--|--|
| Barry F. Carlson, Ph.D.<br>(Hawaii)        | Wakashan, Salishan languages, phonology  |
| Ewa Czaykowska-Higgins,<br>Ph.D. (M.I.T.)  | Theoretical morphology and phonology; Salish linguistics and Polish linguistics      |
| John H. Esling, Ph.D.<br>(Edinburgh)       | Applied linguistics; acoustic phonetics; sociophonetics; second language acquisition |
| Barbara P. Harris, Ph.D.<br>(Victoria)     | Canadian English, English grammar, Chinook jargon; sociolinguistics                  |
| Thomas E. Hukari, Ph.D.<br>(Washington)    | Grammatical theory, phonology, and Western Canadian Indian languages                 |
| Hua Lin, Ph.D.<br>(Victoria)               | Phonology and Chinese linguistics  |
| Joseph F. Kess, Ph.D.<br>(Hawaii)          | Psycholinguistics, Austronesian languages; sociolinguistics                          |
| Leslie Saxon, Ph.D.<br>(Calif., San Diego) | Syntactic analysis, Athapaskan   |

### GRADUATE COURSES

*Students should consult the Department concerning courses offered in any particular field.*



**LING 500 (3) FIELD METHODS AND TECHNIQUES IN LANGUAGE ANALYSIS**

The study of field methods and techniques in language analysis with the aid of native speakers. (*Prerequisite*: 410B and 441 or equivalents)  
NO(3-0)

**LING 501 (1½) CANADIAN ENGLISH**

A history of the phonology, syntax, and vocabulary of Canadian English. (*Prerequisite*: 392 or equivalent)  
NO(3-0)

**LING 503 (1½) SYNTACTIC THEORY**

Recent developments in syntactic theory. (*Prerequisite*: 410B or equivalent)  
F(3-0)

**LING 504 (1½) CURRENT ISSUES IN MORPHOSYNTACTIC ANALYSIS**

Selected topics reflecting recent developments in the study of the interaction of morphology and syntax. (*Pre- or corequisite*: 503 or equivalent)  
NO(3-0)

**LING 505 (1½) PHONOLOGICAL THEORY**

A survey of the development of phonological theory, including such topics as phonological universals. (*Prerequisite*: 441 or equivalent)  
F(3-0)

**LING 506 (1½) LEXICOLOGY AND LEXICOGRAPHY**

The theory of lexicology and the practice of dictionary making.  
NO(3-0)

**LING 507 (1½) SEMANTICS**

Recent developments in semantic theory. (*Prerequisite*: 426 or equivalent)  
NO(3-0)

**LING 508 (1½) CURRENT ISSUES IN GENERATIVE GRAMMAR**

Selected topics reflecting ongoing work in generative theory. (*Prerequisite*: 503 or equivalent)  
S(3-0)

**LING 509 (1½) SOCIOLINGUISTICS**

Selected topics in recent research related to language variation such as bilingualism, language and gender, language attitudes, social dialects.  
S(3-0)

**LING 510 (1½) CURRENT ISSUES IN PHONOLOGY**

An examination of recent developments in phonological theory. (*Prerequisite*: 505 or equivalent)  
S(3-0)

**LING 513 (1½) PROBLEMS IN GRAMMATICAL ANALYSIS**

Special studies selected on an individual basis to allow a student to pursue a particular topic in grammatical analysis. (*Prerequisite*: 508 which may be taken concurrently or permission of the Department)  
NO(3-0)

**LING 515 (1½) PROBLEMS IN PHONOLOGICAL ANALYSIS**

Special studies selected on an individual basis to allow a student to pursue a particular topic in phonological analysis. (*Prerequisite*: 510 which may be taken concurrently, or permission of the Department)  
NO(3-0)

**LING 517 (1½) EXPERIMENTAL PHONETICS LABORATORY**

Review of recent research in the phonetic and acoustic analysis of speech and in spoken language processing. A focus on experimental procedures designed to allow students to pursue individual topics in speech research.  
NO(3-0)

**LING 518 (1½) PROJECTS IN EXPERIMENTAL PHONETICS**

Students will be guided in designing and carrying out experiments on an individual basis in the area of the acoustics and physiology of speech. (*Prerequisite*: 517 or equivalent)  
NO(3-0)

**LING 520 (1½) PACIFIC RIM LANGUAGES**

An overview of the structure of selected indigenous languages spoken around the Pacific Rim. One of the following will be offered in a given term:

- |  |         |
|--|---------|
| 520-A (1½) North American Indian Languages | NO(3-0) |
| 520-B (1½) Austronesian Languages          | NO(3-0) |
| 520-C (1½) Australian Languages            | NO(3-0) |
| 520-D (1½) East Asian Languages            | NO(3-0) |

**LING 524 (1½) ROMANCE LINGUISTICS**

Recent developments in comparative Romance linguistics; particular emphasis will be placed on contrastive features.  
NO(3-0)

**LING 527 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS: INDO-EUROPEAN**

An investigation of language change through time. Theoretical considerations in the reconstruction of phonological and other linguistic subsystems. An integrated account of the evolution of the principal Indo-European languages.  
F(3-0)

**LING 528 (1½) HISTORICAL AND COMPARATIVE LINGUISTICS: NON-INDO-EUROPEAN**

An investigation of evolution of languages other than Indo-European.  
S(3-0)

**LING 560 (ANTH 560) (1½) LINGUISTIC ANTHROPOLOGY** NO(3-0)**LING 570 (PSYC 570) (1½-3) PSYCHOLINGUISTICS**

A seminar offered in collaboration with the Department of Psychology. Selected topics of interest in understanding the comprehension and production of natural language are examined. The most recent topics have been word recognition and lexical access, sentence processing, discourse analysis, linguistic inference and the resolution of ambiguity, and the development of cognitive science interests in reasoning and discourse processes as well as the structure of mental representations.  
F(3-0)

**LING 571 (PSYC 571) (1½ or 3) DEVELOPMENTAL PSYCHOLINGUISTICS**

A seminar offered in collaboration with the Department of Psychology. Selected topics of interest in understanding the acquisition of the child's first language in the areas of phonological and grammatical abilities, as well as the child's knowledge of semantic systems and discourse rules. Recent topics have been the development of conversational abilities in children, including turn taking, questioning and answering, and politeness and negotiation in speech acts.  
NO(3-0)

**LING 574 (1½ or 3) SEMINAR IN APPLIED LINGUISTICS**

A survey of second language learning and teaching theory and TESL/TEFL methodology with emphasis on adult, college and university, and overseas student populations. Evaluation of research and applications as related to socio- and psycholinguistic principles and to adult second language acquisition in natural settings.  
F(3-0)

**LING 580 (1½ or 3) LINGUISTICS SEMINAR**

(The contents of this course will vary.) (May be repeated for credit)  
NO(3-0)

**LING 581 (1½ or 3) LINGUISTICS COLLOQUIUM**

Students will prepare a written research paper (20-30 pages) and present it at a linguistics colloquium. Topics will be of current interest, bearing on linguistic theory, arising from the student's work or individual research. (May be repeated for credit) (*Prerequisite*: Graduate standing)  
FSY

**LING 586 (1½) PHONETICS FOR APPLIED LINGUISTICS**

An investigation of the relationship between phonetic theory, speech analysis, pronunciation teaching, and second language acquisition.  
NO(3-0)

**LING 590 (1½ or 3) DIRECTED STUDIES**

A course designed to enable students to pursue individual interests. (May be repeated for credit)

**LING 597 (0) COMPREHENSIVE EXAMINATION**

Students enrolled in the non-thesis option will be examined orally on at least two previous substantial research papers or their equivalent.  
(Grading: INP, Com, N or F)

**LING 599 (Credit to be determined) THESIS**

(Grading: INP, Com, N or F)



Students enrolled in courses numbered 601 to 603 will explore current areas of research in the Linguistics literature, under the direction of their supervisory committee and other members of the Department. Each course may be repeated to a maximum of 3 units.

#### LING 601 (1½ or 3) INDIVIDUAL STUDIES IN SYNTAX

(Prerequisites: 502, 503 or equivalent courses, and graduate standing)

#### LING 602 (1½ or 3) INDIVIDUAL STUDIES IN PHONOLOGY

(Prerequisites: 505 or an equivalent course, and graduate standing)

#### LING 603 (1½ or 3) INDIVIDUAL STUDIES IN HISTORICAL LINGUISTICS

(Prerequisites: 527 or an equivalent course, and graduate standing)

#### LING 690 (1½ or 3) INDIVIDUAL STUDIES

A research topic will be pursued in depth under the direction of the student's supervisor. Students are expected to write a research paper (or papers) and to present a colloquium based on their work. This course may be repeated for credit to a maximum of 6 units. (Prerequisites: Admission to a Ph.D. program in Linguistics and 508, and 510 or equivalent)

#### LING 699 (Credit to be determined) PH.D. DISSERTATION

(Grading: INP, Com, N or F)

## MATHEMATICS AND STATISTICS

The Department of Mathematics offers graduate programs leading to the degrees of M.A., M.Sc., and Ph.D.

There are two distinct types of Master's programs: a conventional program which emphasizes the theory and foundations necessary for contemporary areas of research, and an applied program which focuses on the applications of theory to problems in the mathematical sciences or other disciplines.

Students admitted to a Master's program will normally have a Bachelor's degree in Mathematics or Statistics. A student without the necessary background may be considered for a pre-entry program as outlined in the general regulations for admission to the Faculty of Graduate Studies. Foreign students are strongly encouraged to write the Mathematics GRE.

Admission into the Ph.D. program will normally require a Master's degree in Mathematics or Statistics and excellent research potential, documented by the quality of the Master's thesis or letters of recommendation. Students showing outstanding promise may be permitted to enroll directly in the Ph.D. program with only a Bachelor's degree. Students whose first language is not English must achieve a score of at least 575 on the test of English as a Foreign Language (TOEFL) and at least 5 on the Test of Written English (TWE). All applicants are strongly encouraged to submit the scores of the Graduate Record Examination General Test (GRE) and its Subject Test in Mathematics.

All Ph.D. students are admitted to the Faculty of Graduate Studies as *provisional* candidates until they have passed their candidacy examinations, at which time they are automatically classified as *candidates* for the Doctor of Philosophy.

Each Master's student must complete a program consisting of a minimum of 15 units.

The conventional Master's program typically consists of a thesis of 6 units, another 6 units of courses at the 500 level or higher, including the Graduate Seminar, and the remaining 3 units at the 400 level or higher.

The applied Master's program usually consists of 6 courses at the 500 level or higher, including the Graduate Seminar, typically some courses in mathematical modelling, statistics, operations research, or computational methods, and a thesis of 6 units containing a substantial contribution to a problem from an applied area. The department will assist students in identifying suitable problems from appropriate areas of application. The student will be expected to maintain contact with the individual or organization from which the problem originated.

The Department of Mathematics and Statistics may accept appropriate courses from other departments for credit towards a Master's degree in Mathematics. Such courses should be selected in consultation with the student's supervisory committee.

Students admitted into the Ph.D. program are required to complete a minimum of 4 graduate courses totalling 6 units, and a dissertation of original, publishable research. Students entering the program without a Master's degree must complete a minimum of 8 graduate courses totalling 12 units as well as a dissertation of original, publishable research. All students are required to pass a candidacy examination consisting of three parts in distinct areas within their first 18 months of study. All students are also required to demonstrate a reading knowledge of one of French, German or Russian.

All graduate students are governed by the Departmental regulations in force at the time of the student's initial graduate registration.

Each Master's student is under the direction of a Supervisory Committee of at least three members, including the student's Academic Supervisor, who also acts as chairperson of the committee. For each Ph.D. student there shall be a Supervisory committee of at least four members, chaired by the student's Academic supervisor, with at least one committee member from outside the Department of Mathematics and Statistics. The committee members must be approved by the Dean of Graduate Studies and are normally members of the Faculty of Graduate Studies.

The committee examines the thesis and conducts a final oral examination of the candidate on the thesis. This oral examination is chaired by the Dean of Graduate Studies or the Dean's nominee.

The student is responsible for becoming familiar with other regulations as outlined in the University Calendar and the Calendar in the Faculty of Graduate Studies.

#### Faculty and Fields of Research

|   |   |
|---|---|
| Christopher J. Bose, Ph.D.<br>(Toronto)                     | Ergodic theory  |
| Ernest J. Cockayne, Ph.D.<br>(British Columbia)             | Graph theory, combinatorics   |
| Roger R. Davidson, Ph.D.<br>(Florida State)                 | Statistics, applied probability   |
| Florin M. Diacu, Ph.D.<br>(Heidelberg)                      | Chaos, dynamical systems  |
| Albert Hurd, Ph.D.<br>(Stanford)                            | Nonstandard analysis, dynamical systems, partial differential equations   |
| Reinhard Illner, Ph.D.<br>(Bonn)                            | Mathematical physics, partial differential equations, applied mathematics |
| Bruce R. Johnson, Ph.D.<br>(Oregon)                         | Mathematical statistics, probability                                      |
| Mary L. Lesperance, Ph.D.<br>(Waterloo)                     | Statistical inference, biostatistics, industrial statistics               |
| Gary MacGillivray, Ph.D.<br>(Simon Fraser)                  | Discrete mathematics, theoretical computing science                       |
| Robert A. MacLeod, Ph.D.<br>(Alberta)                       | Number theory   |
| C. Robert Miers, Ph.D.<br>(Calif., Los Angeles)             | Functional analysis, ring theory  |
| Donald J. Miller, Ph.D.<br>(McMaster)                       | Algebra, graph theory   |
| Robert E. Odeh, Ph.D.<br>(Carnegie Institute of Technology) | Statistics  |
| William E. Pfaffenberger, Ph.D.<br>(Oregon)                 | Functional analysis, operator theory                                      |



|  |   |
|--|---|
| John Phillips, Ph.D.<br>(Oregon)             | Operator algebras, operator theory  |
| Ian F. Putnam, Ph.D.<br>(Calif., Berkeley)   | Operator algebras, topological dynamics   |
| William J. Reed, Ph.D.<br>(British Columbia) | Stochastic modelling and statistics in resource management and economics  |
| Ahmed R. Sourour, Ph.D.<br>(Illinois)        | Functional analysis, operator theory, linear algebra  |
| Hari M. Srivastava, Ph.D.<br>(Jodhpur)       | Analysis, applied mathematics, mathematical physics   |
| Pauline van den Driessche, Ph.D.<br>(Wales)  | Mathematical models in biology, combinatorial matrix analysis   |
| Jane (Juan-Juan) Ye, Ph.D.<br>(Dalhousie)    | Optimal deterministic and stochastic control theory and its applications, nonsmooth analysis: theory and applications, nonsmooth optimization |

## GRADUATE COURSES

Students should consult the Department of Mathematics and Statistics concerning courses offered in any particular year.

### MATHEMATICS

#### MATH 510 (1½) ABSTRACT ALGEBRA

#### MATH 511 (1½) TOPICS IN MATRIX THEORY AND LINEAR ALGEBRA

#### MATH 520 (1½) NUMBER THEORY

#### MATH 522 (1½) COMBINATORICS (Prerequisite: 422 or permission of the Department)

#### MATH 523 (1½) GRAPH THEORY (Prerequisite: 423 or permission of the Department)

#### MATH 530 (1½) REAL ANALYSIS Abstract measure and integration; product measures; measures on locally compact spaces and the Riesz representation theorem; the Stone-Weierstrass theorem.

#### MATH 531 (1½) FUNCTIONAL ANALYSIS

#### MATH 532 (1½) INTRODUCTION TO OPERATOR THEORY

#### MATH 533 (1½) TOPICS IN OPERATOR THEORY AND OPERATOR ALGEBRAS (May be taken more than once in different areas with the permission of the Chair of the Department)

#### MATH 535 (1½) TOPICS IN ANALYSIS Topics may include some of the following: ergodic theory, dynamical systems, potential theory, harmonic analysis. (May be taken more than once in different areas with the permission of the Chair of the Department)

#### MATH 538 (1½) COMPLEX ANALYSIS Topics chosen from: conformal mappings, the Riemann mapping theorem, the maximum principle, infinite products, Picard's theorem, normal families, Hp-spaces, approximation by rational functions, the Riemann zeta function, analytic continuation and Riemann surfaces. (Prerequisite: 330B or 338 or equivalent)

#### MATH 540 (1½) TOPOLOGY

#### MATH 550 (1½) TOPICS IN APPLIED MATHEMATICS (May be taken more than once in different areas with the permission of the Chair of the Department)

#### MATH 551 (1½) DIFFERENTIAL AND INTEGRAL EQUATIONS

#### MATH 555 (1½) TOPICS IN PROBABILITY (May be taken more than once in different areas with the permission of the Chair of the Department)

#### MATH 560 (1½) MATHEMATICAL MODELS The formulation, analysis and interpretation of mathematical models of selected scientific topics.

#### MATH 570 (1½) OPTIMAL CONTROL THEORY Formulation of calculus of variations and optimal control problems. Euler and Jacobi necessary conditions. Method of dynamic programming. Existence and regularity of optimal controls. Optional topics may include: stochastic optimal control of discrete systems; optimal control and optimal stopping of Markov diffusion processes governed by stochastic differential equations and optimal control of piecewise deterministic processes.

#### MATH 581 (1½) DIRECTED STUDIES Directed studies may be available in the areas of faculty interest. (May be taken more than once in different areas with the permission of the Chair of the Department)

#### MATH 585 (0 or 1½) SEMINAR (May be taken only once for credit in any degree program. The seminar leader will inform students of the requirements for credit before the seminar commences)

#### MATH 586 (0 or 1½) OPERATOR THEORY SEMINAR (May be taken only once for credit in any degree program. The seminar leader will inform students of the requirements for credit before the seminar commences)

#### MATH 587 (0 or 1½) APPLIED MATH SEMINAR (May be taken only once for credit in any degree program. The seminar leader will inform students of the requirements for credit before the seminar commences)

#### MATH 588 (1½) DISCRETE MATHEMATICS SEMINAR (May be taken more than once with the permission of the Chair of the Department)

#### MATH 591E (1½) TOPICS IN MATHEMATICS FOR SECONDARY TEACHERS Intended for students enrolled in a Master's program specializing in Mathematics Education but open to students enrolled in other master's programs in Education. One of the four topics: Geometry, Mathematical Modelling, Data Analysis, History & Philosophy of Mathematics will be taught in a given term. Topics will be rotated each term the course is offered. (This course may be taken more than once provided topics are not repeated) (Prerequisites: 3 units of 300 level mathematics)

#### MATH 599 (3-6) MASTER'S THESIS (Grading: INP, Com, N or F)

#### MATH 690 (1½ to 3) DIRECTED STUDIES May be available in areas of faculty interest. (May be taken more than once in different areas with the permission of the Chair of the Department) Pro forma required.

#### MATH 699 (30-45) DISSERTATION (Grading: INP, COM, N or F)

### STATISTICS

#### STAT 552 (1½) APPLIED STOCHASTIC MODELS

#### STAT 553 (1½) MULTIVARIATE ANALYSIS

#### STAT 554 (1½) TIME SERIES ANALYSIS

#### STAT 556 (1½) TOPICS IN STATISTICS (May be taken more than once in different areas with the permission of the Chair of the Department)

#### STAT 557 (1½) SAMPLING TECHNIQUES



**STAT 558 (1½) GENERAL LINEAR MODELS****STAT 561 (1½) THEORY OF INFERENCE****STAT 562 (1½) DISTRIBUTION FREE STATISTICS****STAT 563 (BIOL 563) (1½) TOPICS IN APPLIED STATISTICS**

Survival analysis, generalized linear models, multivariate normal models, resampling methods, nonparametric and robust methods, meta-analysis, miscellaneous techniques.

## MECHANICAL ENGINEERING

**Degree of Master of Engineering**

The Department offers programs of study in Mechanical Engineering leading to the degrees of Master of Engineering (M.Eng.), Master of Applied Science (M.A.Sc.) and Doctor of Philosophy (Ph.D.).

The M.Eng. program is designed to provide students with an opportunity to strengthen and extend the knowledge they have gained at the undergraduate level. It consists of eighteen units of course work, including the M.ENG. Project Report MECH 598.

The work leading to the project must be performed under the direction of an academic supervisor who is a member of the Department's graduate faculty. It must be described in detail in a formal report written by the student. The oral examination of the student will be based on the project. Each student's program is subject to the approval of the Department.

**Degree of Master of Applied Science**

The work leading to the degree of M.A.Sc. provides an opportunity for the student to pursue advanced studies and to carry out research or undertake creative design in a field of mechanical engineering under the supervision of a member of the Department's graduate faculty.

The program for the M.A.Sc. degree consists of a minimum of nine units of course plus a thesis of nine units. The topic of the thesis and the required course work are subject to the approval of the Department.

**Degree of Doctor of Philosophy**

The objective of the Ph.D. program is the accomplishment of independent and original research work leading to significant advancement of knowledge in the field of mechanical engineering.

The minimum requirement for admission to the doctoral program is a master's degree in science or engineering. In exceptional cases, a student registered for a master's degree in the Department of Mechanical Engineering may be allowed to transfer to the doctoral program without completing the masters program.

A student entering the doctoral program with a master's degree is required to complete a program of thirty-three units. This program includes a minimum of six units of approved courses and a thesis equivalent to twenty-seven units.

A student transferring from a master's program to the doctoral program is required to complete a program of at least forty-five units. This program includes a minimum of eighteen units of approved courses and a thesis equivalent to twenty-seven units. For those students transferring from a master's program, credit will normally be given for any courses already completed.

All Ph.D. candidates are required to fulfill the course requirement and to pass an oral candidacy examination. This examination must be taken no later than fifteen months after initial registration in the doctoral program. They will be assessed on the basis of oral examinations on fundamentals related to their field of research, and on the basis of a written research proposal which must be defended orally before their supervisory committee.

**Co-operative Option**

The Department participates in the Co-operative Education Program of the Faculty of Graduate Studies. Under this program, an M.Eng. or M.A.Sc. student normally spends the first year of the program on course work. The second year is spent working at a paid research-related position in either industry or government. During the third and subsequent years, the student alternates between the University and the place of work to complete the research and write and defend the thesis.

Under exceptional circumstances, when it is quite evident that the industrial work periods form an essential and integral part of a student's thesis project, a Ph.D. student may participate in the cooperative graduate program.

Participation in the co-operative program requires:

- Student's acceptance by a suitable sponsoring organization; and
- the organization's agreement to allow the publication of the student's research findings in open literature.

As an integral part of the graduate program, students are normally required to undertake teaching or research assistantships within the department.

**Facilities**

The Department has excellent research facilities. These include extensive computational resources, hardware and software, a four axis machine centre, a two axis lathe, a coordinate measuring machine, a comprehensive robot laboratory, and a versatile material testing machine. In addition, the Department laboratories are well equipped with state-of-the-art measuring equipment for work related to stress analysis, vibrations, and flow problems.

**Applications**

Initial inquiries regarding graduate studies in Mechanical Engineering should be addressed to the Graduate Adviser, Department of Mechanical Engineering, together with transcripts.

**Faculty and Research Interests**

|   |  |
|---|--|
| John Barclay, Ph.D.<br>(California, Berkeley)                                 | Cryofuel systems, magnetic materials, heat transfer  |
| Colin Bradley, Ph.D.<br>(Victoria)  | Manufacturing, machine vision and industrial sensors   |
| Nedjib Djilali, Ph.D.,<br>(Brit. Col.) P.Eng.                                 | Fluid dynamics, convective heat transfer, crystal growth, fuel cells                                 |
| Allan Doige, P.Eng., Ph.D.,<br>(Purdue)                                       | Acoustics and vibrations   |
| Zuomin Dong, Ph.D.<br>(New York State, Buffalo)                               | Computer aided design and manufacturing (CAD/CAM), artificial intelligence, optimization, fuel cells |
| Sadik Dost, P.Eng., Ph.D.,<br>(Istanbul)                                      | Applied mechanics, biomechanics, and materials   |
| James B. Haddow, Ph.D.<br>(Manchester)  | Elasticity, plasticity, viscoelasticity, thermoelasticity  |
| Charles Konzelman, Ph.D.<br>(Pennsylvania State)                              | Acoustics and vibration  |
| Xianguo Li, Ph.D.<br>(Northwestern)   | Combustion, fluid mechanics, heat transfer, fuel cells   |
| Gerard F. McLean, P.Eng., Ph.D.<br>(Waterloo)                                 | Image processing, instrumentation, design, fuel cells  |
| Meyer Nahon, P.Eng., Ph.D.<br>(McGill)  | Robotics, biomechanics, undersea vehicles, fuel cells  |
| Ron Podhorodeski, P.Eng., Ph.D.<br>(Toronto)                                  | Robotics, mechanisms, design, fuel cell manufacture  |
| James W. Provan, P.Eng., Ph.D.<br>(Colorado)                                  | Mechanics of materials, fracture, fatigue and reliability  |
| Hans-Holger Rogner, Ph.D.<br>(Karlsruhe)                                      | Energy system modelling, hydrogen technology, fuel cells   |
| David S. Scott, P.Eng., Ph.D.<br>(Northwestern)                               | Energy systems, fuel cells   |
| Inna Sharf, P.Eng., Ph.D.<br>(Toronto)  | Dynamics, space robotics, computational mechanics  |
| Yury Stepanenko, Ph.D.<br>(Moscow<br>D.Sc. (Academy of Science,<br>U.S.S.R.)) | Robotics, dynamics and control   |



Behrouz Tabarrok, P.Eng.,  
D.Phil. (Oxon.)

Geoffrey W. Vickers, P.Eng.,  
Ph.D. (Manchester)

Joanne Wegner, P.Eng., Ph.D.  
(Alberta)

Stress analysis, vibrations, heat  
transfer, fluid flow, finite ele-  
ments, buckling analysis, dynam-  
ics

Computer aided design and manu-  
facture

Dynamics, continuum mechanics,  
viscoelasticity

## GRADUATE COURSES

The following courses are offered by the Department. However, some courses may not be offered this year.

Students who have taken content equivalent courses at the university of Victoria or elsewhere will not be permitted to take these courses again for credit.

### MECH 501 (1½) INTRODUCTION TO CONTINUUM MECHANICS

Analysis of deformation, motion and stress in Cartesian coordinates. Thermodynamics of continua. Constitutive equations. Linear elasticity. Fluid flow. Special problems in linear elasticity and fluid mechanics. (3-0)

### MECH 502 (1½) INTRODUCTION TO ELASTIC STABILITY

Stability, methods of elastic stability. Stability of elastic columns; equilibrium, energy, dynamic and initial imperfection approaches. Beams - columns. Frames. Beams supported by elastic foundations. Plates. (3-0)

### MECH 503 (1½) APPLIED ACOUSTICS

The acoustic wave equation with solutions for plane and spherical cases; acoustic intensity and impedance. Transmission and reflection of sound between media; normal and oblique incidence. Absorption and attenuation of sound waves in fluids. Radiation of acoustic sources in a free field. Acoustics of cavities and ducts; travelling wave and standing wave representations, transmission matrices for plane-wave acoustics with applications to resonators, filter and complete piping or duct systems. Electrical circuit analogy of the internal impedance and strength of acoustic sources. Elements of environmental, architectural and underwater acoustics. (3-0)

### MECH 504 (1½) MECHANICAL VIBRATION

Multi-mass linear systems; flexibility and stiffness matrices, natural frequencies, mode shapes and orthogonal properties, coupled and uncoupled system equations, solutions for damped or undamped response to arbitrary forcing and initial conditions. Linear continuous systems; wave equation problems and lateral beam vibration with classical boundary conditions. Effects of added mass or stiffness on frequencies and modes. Forced and transient response. Transfer matrix methods for lumped parameter systems and continuous systems; application to axial and torsional vibration of rods, shafts and beams with attached mass or stiffness. Non-linear vibration; basic methods for solution. Characteristic non-linear effects. Random vibration; elements of describing random response, Fourier transforms and frequency response functions. (3-0)

### MECH 505 (1½) LINEAR ELASTICITY

Constitutive relations for classical elasticity. Plane problems — Airy stress function, torsion problem, bending of beams, variational methods. Complex variable methods, dynamic problems. (3-0)

### MECH 506 (1½) WAVE MOTION

Main classes of wave motion, hyperbolic systems and examples from gas dynamics. Some topics in wave propagation, including wave propagation in elastic solids, and linear dispersive waves. (3-0)

### MECH 507 (1½) ANALYTICAL DYNAMICS

Review of Newton's equations. Generalized coordinates, constraint equations, virtual displacements, work function and potential energy, stability of equilibrium, d'Alembert's principle, conservation of energy, Gauss' principle of least constraint, Lagrange's equation, dissipating forces, introduction to calculus of variations, Hamilton's principle, phase space, principle of least action, and Hamilton Jacobi's equation. (3-0)

### MECH 509 (1½) NONLINEAR ELASTICITY

Analysis of deformation, discussion of Cauchy, Nominal and Piola-Kirchhoff stresses. Objectivity, strain energy functions, thermodynamics of finite elastic deformation, problems of controllable deformation, problems of infinitesimal deformation superimposed on finite deformation. (3-0)

### MECH 510 (1½) NON-LINEAR DYNAMICS AND CHAOS

Undamped free oscillations; some exact solutions, perturbation methods, harmonic balance, Ritz method. Damped free oscillations; influence of small damping terms, method of slowly changing phase and amplitude, limit cycles. Forced oscillations; classical approaches, periodic attractors, strange attractor, chaotic attractor, Poincaré map. Liapounov stability theory and bifurcations. Self excited oscillations. Hamiltonian systems. (3-0)

### MECH 512 (1½) VARIATIONAL METHODS IN OPTIMAL CONTROL THEORY

Relationships between extremum problems and optimal control; the Euler equation, the Legendre conditions; classification of extremum problems (variable endpoints, transversality conditions, extremals with breaks etc.), conditional extremums, isoperimetric problems, Lagrange, Maier and Bolza problems; variational problems in parametric form; introduction to the field theory; Jacobi, Legendre and Weierstrass conditions; extremum problems with constraints, linear optimum control problem, the Maximum Principle (Pontrjagin); the Dynamic Programming (Bellman); and examples of applications of variational methods. (3-0)

### MECH 514 (1½) DYNAMICS AND CONTROL OF UNDERSEA VEHICLES

Static stability and control. General equations of motion. Linearization of the motion equations. Decoupling into longitudinal and lateral motion. Hydrodynamic derivatives. Stability of uncontrolled motion (longitudinal and lateral). Mode shapes. Response to control inputs. Closed loop control. Stability augmentation systems.

### MECH 520 (formerly ENGR 502) (1½) COMPUTER-AIDED DESIGN (CAD)

Basic elements of CAD and relevance to current industrial practice. Computational geometry for design and 3-D geometry. Methods for curve and surface fitting. Input and output devices for computer graphics, passive as well as active. Representation of physical surfaces and computer aided drafting. Graphical programming languages. Development of interactive 3-D computer graphics. (Prerequisite: ENGR 150 or equivalent) (3-0)

### MECH 521 (1½) COMPUTER-AIDED MANUFACTURE (CAM)

Review of common manufacturing processes and the organization of the manufacturing unit. Manufacturing process aided by computers. Numerically controlled machine tools. Numerically controlled part programming. Machining of doubly curved surfaces. Computerized numerically controlled tools and adaptive control systems. Industrial robots. Application of CAD/CAM in engineering and medicine. (3-0)

### MECH 522 (1½) ENGINEERING OPTIMIZATION AND ITS APPLICATIONS

One dimensional optimization techniques based on region elimination, polynomial approximation, and derivations. Multiple variable optimization techniques, including direct search methods and gradient-based methods. Constrained optimization based on the penalty, feasible direction, reduced gradient and gradient projection. Introduction to linear programming, integer programming, and quadratic programming. Applications of numerical optimization to solve typical mechanical design, manufacturing, planning and control problems. Program package for design optimization. (3-0)

### MECH 524 (1½) PLANNING AND CONTROL OF ADVANCED MANUFACTURING SYSTEMS

Introduction to manufacturing and production systems with the basic taxonomy of manufacturing, types of production processes, components of a production system, and concept of production control. Production process planning covering the experience-based process planning, knowledge-based approach using decision tables and decision



trees, process capability analysis, group technology, and Computer-Aided Process Planning. Topics of planning and control of production systems, including forecasting, inventory system, aggregate production planning, material requirements planning, and operation sequencing and scheduling. Case studies on the planning and control of advanced manufacturing systems. (3-0)

#### MECH 531 (1½) FLUID MECHANICS

Governing principles; continuity, momentum, energy, stress, constitutive relations. Viscous incompressible flow; exact solutions of Navier-Stokes equations. Boundary-layer theory. Potential flow. Stability and turbulence. (3-0)

#### MECH 535 (1½) COMPUTATIONAL FLUID DYNAMICS AND HEAT TRANSFER

Methods of prediction and historical perspective. Governing differential equations. Finite difference and finite volume discretization. Schemes for steady and unsteady multidimensional heat conduction problems. Stability analysis and convergence. Control volume formulation for fluid flow. Schemes for convection dominated flows. The SIMPLE algorithm. Computation of turbulent flows; wall functions; turbulence modelling. The course will involve individual projects.

#### MECH 537 (1½) INTRODUCTION TO COMBUSTION ENGINEERING

Introduction to combustion fundamentals, phenomena and applications. Review of chemical thermodynamics. Introduction to chemical kinetics. Transport phenomena and conservation equations for chemically reacting multicomponent systems. Premixed and diffusion flames. Ignition and extinction. Pollutant formation and control. Environmental concerns over combustion processes.

#### MECH 541 (1½) ADVANCED THERMODYNAMICS

Principles of classical thermodynamics; postulates, conditions of equilibrium, some relationships and simple systems, reversible process, Legendre transformations, extremum principles, Maxwell relations, stability, first-order phase transitions. Thermodynamics of irreversible processes. (3-0)

#### MECH 542 (1½) EXERGY ANALYSIS AND ENERGY SYSTEMS

Second law efficiencies. Exergy property relations. Chemical exergy and fuel chemical exergy. Energy systems modelling and macro models. (3-0)

#### MECH 543 (1½) CRYOGENIC ENGINEERING

Cryogenics: definition and applications. Refrigeration and liquefaction cycles — cascade, Linde, Claude and Collins cycles; liquefaction of air, hydrogen and helium. Regenerative refrigeration cycles — Stirling, Gifford-McMahon cycles and their derivatives. Magnetic refrigeration — Carnot, Ericsson and AMR processes; application to liquefaction of natural gas and hydrogen. Refrigeration below 1K — dilution refrigeration, magnetic refrigeration. Non conventional refrigeration methods.

#### MECH 544 (1½) CRYOGENIC SYSTEMS DESIGN

Low temperature properties of engineering materials. Cryogenic fluids — thermodynamic transport properties; properties of mixtures, vapor-liquid equilibria. Mass transfer — adsorption and purification of gases, separation of gases by distillation. Liquefaction of gases. Air separation. Processing of natural gas — mixed refrigerant and Claude cycles, industrial systems. Principles of process simulation; formulation and solution of conservation and rate equations; simulation of cryogenic systems. Components of refrigeration systems: compressors — types, selection and sizing; expansion machines — design of reciprocating and turbine expanders; heat exchangers — classification and construction, design methods — LMTD and  $\epsilon$  — NTU methods, irreversibilities in cryogenic heat exchangers.

#### MECH 550 (1½) ADVANCED CONTROL THEORY

State-space representation of dynamic systems, linear system dynamics, state transition matrices, canonical forms. Controllability and observability, shaping the dynamic response, linear observers. Compensator design, linear quadratic optimal control. (3-0)

#### MECH 551 (1½) ADVANCED KINEMATICS OF MANIPULATORS

The material covered includes: point and direction, and line and screw motion description; homogeneous, line and screw coordinate, and quaternion representations; inverse displacement solution by analytic, root finding, hybrid and numerical methods; appropriate frames of reference; screw systems and transforms; local and globally optimum solution of redundant rates; overdetermined and near degeneration solutions; multi-arm kinematics. Application to open, closed parallel and hybrid, simple and general structures is considered. (3-0)

#### MECH 553 (1½) ROBOTIC MANIPULATORS: KINEMATICS, DYNAMICS AND CONTROL

Direct and inverse kinematics, numerical methods for solving inverse-kinematic problems, statics, force control (impedance and hybrid), robot dynamics (Newton-Euler and Lagrange formalisms), generation of robot dynamic models for controllers (nonlinear and linearized models), control methods, adaptive robotic methods, stability and robustness. (3-0)

#### MECH 555 (1½) COMPUTER VISION

Review of Image Processing; point operations, digital filtering, frequency domain processing. Boundary Detection; edges and edge detection, thresholding, line thinning, gap filling, rough transform. Region Segmentation; generalized segmentation schemes, region growing, split/merge, simulated anneal, texture classification and description. (3-0)

#### MECH 561 (1½) ANALYTICAL METHODS IN ENGINEERING

Analytic Functions and Applications in Fluid Mechanics: multi-valued complex functions, analytic functions, Cauchy integral theorem, residues, singularities, conformal mapping and applications. Laplace transform and its applications to elementary problems in vibrations, wave propagation and heat transfer in solids. Fourier analysis and boundary value problems and applications in vibration, wave propagation, solid mechanics. Introduction to calculus of variation. Energy methods, and approximate methods in solid and fluid mechanics. (3-0)

#### MECH 563 (1½) FINITE ELEMENT ANALYSIS

Introduction to the basic principles of finite element analysis. Development of discrete equations for problems of 1, 2, and 3D elasticity. Applications to problems of stress analysis, vibrations, heat transfer and fluid flow. This course includes a number of projects encouraging students to use large-size finite element analysis programs. It should be of interest to mechanical and electrical engineers, as well as students from the Departments of Computer Science and Mathematics. (3-0)

#### MECH 571 (1½) FRACTURE, FATIGUE AND MECHANICAL RELIABILITY

Linear elastic and elasto-plastic fracture mechanics. Classical fatigue analysis. Crack propagation. Low cycle fatigue. Reliability, durability and damage tolerance analysis. Stochastic processes and their application to reliability. Maintenance and inspection optimization. Industrially significant applications are highlighted throughout the course. (Prerequisite: MECH 320 or equivalent)

#### MECH 590 (1½) DIRECTED STUDIES

A wide range of topics will be available for assignments.

#### MECH 598: (3-6) M.ENG. PROJECT REPORT

(Grading: INP, COM, N or F)

#### MECH 599: (9) M.A.Sc. THESIS

(Grading: INP, COM, N or F)

#### MECH 651 (1½) NONLINEAR AND ADAPTIVE IMAGE PROCESSING

Recent trends in adaptive image processing. Historical Perspectives. Spatially adaptive techniques. Adaptation mechanisms and indicator functions. Adaptive noise suppression. Adaptive enhancements of edges. Adaptive image coding. Image models and homomorphic transforms. Synthetic highs and second generation image processing. Correlates in biological vision systems. (Prerequisite: MECH 444) (3-0)

MECH 699 (27) Ph.D. DISSERTATION (Grading: INP, COM, N or F)



## SCHOOL OF MUSIC

The School of Music offers the following graduate degree programs: M.Mus. in Composition, M.Mus. in Performance, M.A. in Musicology, M.A. in Musicology with Performance, and Ph.D. in Musicology.

All Master's programs require a minimum attendance of two winter sessions and at least 18 units of course credit, of which three units may be undergraduate courses at the 300 level or above. The Ph.D. requires a minimum of three years of study, including one year of course work (a minimum of 12 units), the successful completion of candidacy examinations, and the writing and defence of the dissertation. All programs have a certain amount of flexibility to suit the individual needs of each candidate.

### M.MUS. IN COMPOSITION

Applicants for admission to the M.Mus. in Composition program should submit, in addition to the regular admission forms, copies of scores and tapes of recent work. The program includes private instruction in composition, and courses in history and theory. Opportunities are available to work in the School's well-equipped electronic music studio and to take part in solo and ensemble performance.

Candidates for the degree are required to complete an extensive original composition for instruments, voices, or mixed media. This work normally is performed during the final year of study, and the performance is followed by an examination.

### M.MUS. IN PERFORMANCE

Acceptance for the M.Mus. in Performance program requires specialization at an advanced level in a specific performance medium (e.g., trumpet, piano, voice). Applicants are encouraged to audition in person; if this is not possible they may submit a high quality recording of at least 30 minutes duration, presenting solo playing of two or more works in contrasting styles.

The candidate's individual program is designed to further growth as a soloist and ensemble participant; in addition to performance-related courses, the program includes study in related areas, such as conducting, performance practices, and music history. All candidates will perform a final graduating recital, followed by an oral examination.

### M.A. AND PH.D. IN MUSICOLOGY

In addition to the standard admission forms, applicants for the Musicology programs should send examples of their work in the field of music history, such as honours paper or Master's thesis.

All Musicology students are required to demonstrate a good reading knowledge of German and French. In addition, a reading knowledge of other foreign languages may be required if necessary for the candidate's intended field of specialization. For Master's students, the language exams constitute part of the written Comprehensive examinations, usually taken at the end of the first year of the program.

A substantial thesis is required of all students in the M.A. program in Musicology; Ph.D. students write a dissertation, which must be an original contribution to knowledge. Completion of the thesis or dissertation is followed by an oral defence.

### M.A. IN MUSICOLOGY WITH PERFORMANCE

This program is intended for Musicology students who are proficient performers and who wish to continue serious study of their instrument while pursuing musicological research. Applicants for this program are required to submit written examples of their work in the field of music history and either arrange for an audition or submit a tape as described under M.Mus. in Performance.

The language requirements are the same as those for students in the Musicology program, as are the written Comprehensive examinations. Students are required to give a lecture-recital, which forms the basis for the written thesis and for the oral defence.

#### Faculty and Areas of Interest

Joan Backus, Ph.D. History, theory  
(Victoria)

Alexandra Browning-Moore  
B.Mus. (British Columb.)

Christopher Butterfield, M.A.  
(S.U.N.Y., Stony Brook)

John A. Celona, Ph.D.  
(Calif., San Diego)

George Corwin, D.M.A.  
(Rochester)

Richard Ely, M.M.  
(Illinois)

Ann Elliott Goldschmid, B.M.  
(Boston)

Pamela Highbaugh, M.M.  
(Indiana)

William Kinderman, Ph.D.  
(Berkeley)

Patricia Kostek, M.M.  
(Michigan State)

Harald M. Krebs, Ph.D.  
(Yale)

Gordana Lazarevich, Ph.D.  
(Columbia)

Michael M. Longton, M.M.  
(British Columb.)

Ian McDougall, M.Mus.  
(British Columb.)

Lanny R. Pollet, M.Mus.  
(Victoria)

Louis D. Ranger, B.Mus.  
(Juilliard)

Arthur Rowe, M.Mus.  
(Indiana)

W. Andrew Schloss, Ph.D.  
(Stanford)

Erich P. Schwandt, Ph.D.  
(Stanford)

Bruce Vogt, M.Mus.  
(Toronto)

Robin Wood, F.R.A.M., LL.D.  
(Victoria)

Voice

Composition, theory

Composition, theory

Conducting

French horn

Lafayette String Quartet, violin

Lafayette String Quartet, cello,  
chamber music

Musicology, aesthetics and per-  
formance practice (19th century)

Clarinet and woodwind tech-  
niques

Music theory (tonal and rhythmic  
structure in 19th- and early 20th-  
century music)

Music history, musicology,  
Mozart, Haydn, 18th century  
comic opera, and Canadian cul-  
tural studies

Theory, computer generated mu-  
sic

Trombone, big band

Flute

Trumpet, brass chamber music

Piano, chamber music

Interactive computer music sys-  
tems

Musicology (Baroque music)

Piano

Piano

### GRADUATE COURSES

Students should consult with the School of Music concerning the courses offered in any particular year.

Apart from the following courses, graduate students are encouraged to take an active part in the performing groups and musical life of the University.

✦ **MUS 500 (1½) SELECTED PROBLEMS IN THEORY AND ANALYSIS** S(3-0)

**MUS 501 (1½) SEMINAR IN HISTORICAL MUSICAL NOTATIONS** NO(3-0)

**MUS 502 (1½) MUSICAL AESTHETICS AND THE THEORY OF CRITICISM** NO(3-0)

**MUS 503 (1½) INTRODUCTION TO GRADUATE STUDY AND MUSIC BIBLIOGRAPHY**  
(All students in musicology must register for this course in their first term of graduate study.) F(3-0)

✦ **MUS 504 (1½) SEMINAR IN PERFORMANCE PRACTICE** S(3-0)



|   |                                  |
|---|----------------------------------|
| <b>MUS 505 (1½) HISTORY OF MUSICAL INSTRUMENTS</b>  | NO(3-0)                          |
| <b>MUS 506 (1½) MUSICAL ACOUSTICS</b>   | NO(3-0)                          |
| <b>MUS 507 (3) COMPUTER MUSIC SEMINAR</b>   | Y(0-3)                           |
| <b>✦ MUS 540 (1) INDIVIDUAL TUITION</b><br>Lessons in instrument or voice. (Approval of the student's Supervisory Committee and permission of the School are required.) | Y(0-1)                           |
| <b>✦ MUS 545 (4) MAJOR INSTRUMENT STUDY</b><br>Individual tuition and master class. (For M.Mus. candidates in performance only)   | Y(2-2)                           |
| <b>✦ MUS 550 (1½) STUDIES IN A PARTICULAR ERA OF MUSIC HISTORY</b>  | NO(3-0)                          |
| <b>✦ MUS 551 (1½) STUDIES IN PARTICULAR FORMS OR GENRES IN MUSIC HISTORY</b>  | F(3-0)                           |
| <b>✦ MUS 552 (1½) STUDIES IN THE MUSIC OF INDIVIDUAL COMPOSERS</b>  | S(3-0)                           |
| <b>✦ MUS 555 (3) INDIVIDUAL TUITION IN COMPOSITION</b>  | Y(0-1)                           |
| <b>** MUS 560 (1½ or 3) SEMINAR IN MUSICOLOGY</b><br>(May be taken more than once for credit to a maximum of 3 units in any 8 month session)                            | FS(3-0)                          |
| <b>MUS 561 (1½ or 3) SEMINAR IN COMPOSITION</b><br>(May be taken more than once for credit to a maximum of 3 units in any 8 month session)                              | NO(3-0)                          |
| <b>✦ MUS 580 (1) ENSEMBLES</b>  | (Grading: COM, N or F)<br>Y(0-4) |

|   |        |
|---|--------|
| <b>✦ MUS 581 (1) CHAMBER MUSIC</b>  | Y(0-3) |
| <b>MUS 588 (1) M.MUS. PRACTICUM</b><br>Recital for performance candidates in first year.<br>(Grading: INC, COM, N or F)   |        |
| <b>✦ MUS 590 (1½ or 3) DIRECTED STUDIES</b>   |        |
| <b>MUS 596 (1½) LECTURE-RECITAL</b><br>A lecture-recital of substantial duration, its topic likely related to the student's thesis. For students in the M.A. program in musicology with performance.  |        |
| <b>MUS 597 (1½) M.MUS. GRADUATING COMPOSITION(S)</b><br>(Grading: INP, INC, COM or F)   |        |
| <b>MUS 598 (1) M.MUS. PRACTICUM</b><br>Degree recital required for performance candidates in final year.<br>(Grading: INP, COM, N or F)   |        |
| <b>§ MUS 599 M.A. THESIS</b><br>(Grading: INP, COM, N or F)   |        |
| <b>✦ MUS 690 (1½ or 3) DIRECTED STUDIES</b>   |        |
| <b>§ MUS 699 PH.D. DISSERTATION</b><br>(Grading: INP, COM, N or F)  |        |
| <b>** All students in musicology must register for this course each year they are in attendance.</b>  |        |
| <b>✦ May be taken more than once at the discretion of the School.</b>   |        |
| <b>✦ Performance candidates and candidates for the M.A. degree in Musicology with performance will normally register for both of these courses in each year of study. Placement in large and small ensembles will be made according to the student's needs and the needs of the School.</b> |        |
| <b>§ Credit to be determined.</b>   |        |

## PHILOSOPHY

### NOT OFFERED IN 1995-96

The Department of Philosophy offers a two year program of graduate study leading to the degree of Master of Arts. At present this program is restricted to Logic and Cognitive Science.

Admission to M.A. study in philosophy is normally restricted to students with a strong undergraduate degree in philosophy.

#### Logic and Cognitive Science

This M.A. program permits students to specialize in the cross-disciplinary, mutually-reinforcing collaboration between logic and cognitive science. The traditional philosophic discipline of logic provides the received framework for cognitive studies, particularly via classical computational models of mind or artificial intelligence. In its turn, cognitive studies have provided a new vantage point from which to examine broader philosophical issues, such as the nature of the self, mind consciousness, knowledge, and meaning.

To complete the M.A. program in the LCS stream, a student must:

- complete at least 6 units of course work from the following:
 

|          |          |
|----------|----------|
| PHIL 530 | PHIL 510 |
| PHIL 531 | PHIL 511 |
| PHIL 532 | PHIL 514 |
- complete another 3 units of course work which may be made up by some combination of further work in the courses listed under (1) above, PHIL 500, PHIL 590, or the following courses from other departments, given the approval of the department involved, and given the approval of the Philosophy Graduate Advisor:
 

|           |                               |
|-----------|-------------------------------|
| CSC 524   | COMPUTATIONAL COMPLEXITY      |
| CSC 532   | LOGIC PROGRAMMING             |
| LING 570/ |                               |
| PSYC 570  | PSYCHOLINGUISTICS             |
| MATH 510  | ABSTRACT ALGEBRA              |
| PSYC 540  | HUMAN NEUROPSYCHOLOGY         |
| PSYC 542  | DEVELOPMENTAL NEUROPSYCHOLOGY |
| PSYC 570  | PSYCHOLINGUISTICS             |
| PSYC 575  | COGNITIVE PSYCHOLOGY          |

- Write a thesis of 9 unit (PHIL 599).

Admission to M.A. study in philosophy under the above program is restricted to students with a strong undergraduate degree in philosophy.

#### Faculty

|   |  |
|---|--|
| Rodger G. Beehler, Ph.D.<br>(Calgary)       | Moral, legal, and political philosophy, philosophy of education.                       |
| Charles B. Daniels, D. Phil.<br>(Oxford)    | Philosophy of mind, ethics, aesthetics, ontology                                       |
| Jeffrey E. Foss, Ph.D.<br>(Western Ontario) | Philosophy of science, philosophy of language, philosophical psychology                |
| Eike-Henner W. Kluge, Ph.D.<br>(Michigan)   | Medical ethics, medieval philosophy, metaphysics, theory of perception                 |
| Monika Langer, Ph.D.<br>(Toronto)           | European philosophy, existentialism, history of philosophy and social/political issues |
| John M. Michelsen, Ph.D.<br>(Washington)    | Greek philosophy, European philosophy since Kant, moral philosophy                     |
| Charles G. Morgan, Ph.D.<br>(Johns Hopkins) | Philosophy of science, logic   |
| James O. Young, Ph.D.<br>(Boston)           | Philosophy of language, aesthetics and metaphysics                                     |

## GRADUATE COURSES

### PHILOSOPHY

#### PHIL 500 (1½ OR 3) TOPICS IN PHILOSOPHY

(May be repeated for credit, given course content differs and approval of Philosophy Graduate Advisor)



**PHIL 510 (1½ OR 3) TOPICS IN COGNITIVE SCIENCE**

A study of the basic assumptions and methodologies of cognitive approaches to the modelling of mind. Standard topics include such things as psychofunctionalism, classical models of artificial intelligence, psychosemantics, the qualia problem and belief-desire psychology. (May be repeated for credit, given course content differs and approval of Philosophy Graduate Advisor)

**PHIL 511 (1½ or 3) TOPICS IN CONNECTIONISM**

A study of contemporary parallel distributed processing or neuro-computational approaches to the modelling of perception, action, and intelligence. (May be repeated for credit, given course content differs and approval of Philosophy Graduate Advisor)

**PHIL 514 (1½ or 3) TOPICS IN COGNITIVIST PHILOSOPHIES OF MIND**

This course emphasizes cognitivist theories of consciousness and meaning (intentionality). (May be repeated for credit, given course content differs and approval of Philosophy Graduate Advisor)

**PHIL 520 (3) HISTORY AND PHILOSOPHY OF SCIENCE**

A study of some turning points in the history of science with particular attention to the conceptual issues underlying scientific theory and

practice. (*Prerequisite:* Open only to teachers enrolled in the M.Ed. Program)

**PHIL 530 (1½ or 3) TOPICS IN CLASSICAL LOGIC**

(May be repeated for credit, given course content differs and approval of Philosophy Graduate Advisor)

**PHIL 531 (1½ or 3) TOPICS IN NON-CLASSICAL LOGIC**

(May be repeated for credit, given the course content differs and approval of Philosophy Graduate Advisor)

**PHIL 532 (1½ or 3) TOPICS IN INDUCTIVE LOGIC**

(May be repeated for credit, given course content differs and approval of Philosophy Graduate Advisor)

**PHIL 590 (1½ or 3) DIRECTED STUDIES**

(May be repeated for credit provided course content differs and approval of Philosophy Graduate Advisor)

**PHIL 599 (9) M.A. THESIS**

(Grading: INP, Com, N or F)

## PHYSICS AND ASTRONOMY

The Department of Physics and Astronomy offers programs of study and research leading to the degrees of M.Sc. and Ph.D.

Normally, work as a research assistant or teaching assistant is an integral part of graduate programs.

Close contact is maintained with the Defence Research Establishment Pacific, the Dominion Astrophysical Observatory, the Dominion Radio Astrophysical Observatory, the Pacific Geoscience Centre, and the Institute of Ocean Sciences. The University of Victoria belongs to a consortium of universities which operates the meson facility TRIUMF.

The Climenhaga Observatory is an integral part of the Department, and major equipment associated with the Observatory includes an image processing system, a 0.5 metre telescope, an iris photometer, a microdensitometer, and a laboratory spectrograph.

**Cooperative Education Program**

The Department participates in the Cooperative Education Program in the Faculty of Graduate Studies and by individual arrangement Physics graduate students may participate in a Cooperative Education program as described in the Faculty of Graduate Studies section of this calendar (section 6.0).

Further information may be obtained from the Chair of the Physics and Astronomy Department Graduate Committee.

**Astronomy and Astrophysics**

Observational and theoretical studies, which may be carried out in conjunction with the Dominion Astrophysical Observatory.

**Condensed Matter Physics**

NMR studies of molecular properties in solids and liquids.

**Geophysics and Ocean Physics**

Geomagnetic induction, space physics, paleomagnetism, seismology, tectonophysics, physical oceanography and ocean acoustics. Research may be carried out in association with the Pacific Geoscience Centre, the Institute of Ocean Sciences, and the Defence Research Establishment Pacific. These areas of study and research are also listed under Earth and Ocean Sciences. Students with an undergraduate degree in physics may prefer to register as graduate students in the Department of Physics and Astronomy rather than in the School of Earth and Ocean Sciences, and to follow the course and program requirements for a graduate degree in physics.

**Nuclear and Particle Physics**

Intermediate and high energy physics experiments using accelerators at TRIUMF, Brookhaven, SLAC or CERN. Particle physics detector development. Magnet design studies for the TRIUMF KAON facility. Theoretical studies of weak interactions and rare decays.

**Theoretical Physics**

General relativity, nuclear and particle physics.

**Faculty and Major Areas of Research**

|  |   |
|--|---|
| Alan Astbury, Ph.D.<br>(Liverpool)                 | Experimental nuclear and particle physics   |
| George A. Beer, Ph.D.<br>(Saskatchewan)            | Experimental nuclear and particle physics   |
| Douglas A. Bryman, Ph.D.<br>(Virginia Polytechnic) | Experimental nuclear and particle physics   |
| Ross Chapman, Ph.D.<br>(British Columbia)          | Ocean acoustics                             |
| Reginald M. Clements, Ph.D.<br>(Saskatchewan)      | Plasma studies                              |
| Fred. I. Cooperstock, Ph.D.<br>(Brown)             | General relativity and astrophysics         |
| Trevor W. Dawson, Ph.D.<br>(UVic)                  | Geophysics                                  |
| Harry W. Dosso, Ph.D.<br>(British Columbia)        | Geomagnetism                                |
| Harold W. Fearing, Ph.D.<br>(Stanford)             | Medium energy and particle physics          |
| Christopher J.R. Garrett, Ph.D.<br>(Cantab)        | Ocean physics                               |
| Ann C. Gower, Ph.D.<br>(Cambridge)                 | Astronomy and astrophysics                  |
| F. David A. Hartwick, Ph.D.<br>(Toronto)           | Astronomy and astrophysics                  |
| Robert E. Horita, Ph.D.<br>(British Columbia)      | Geomagnetism and space physics              |
| Roy D. Hyndman, Ph.D.<br>(Australian National)     | Geophysics                                  |
| Richard K. Keeler, Ph.D.<br>(British Columbia)     | Experimental nuclear and particle physics   |
| M. Lefebvre, Ph.D.<br>(Cambridge)                  | Experimental and high energy physics        |
| Donald E. Lobb, Ph.D.<br>(Saskatchewan)            | Beam transport systems and magnetic studies |
| Glen M. Marshall, Ph.D.<br>(British Columbia)      | Particle physics                            |



|  |  |
|--|--|
| Grenville R. Mason, Ph.D.<br>(Alberta)                       | Experimental nuclear and particle physics        |
| Arthur Olin, Ph.D.<br>(Harvard)                              | Experimental nuclear and particle physics        |
| Charles E. Picciotto, Ph.D.<br>(California)                  | Theoretical nuclear and particle physics         |
| Dale M. Pitman, Ph.D.<br>(Toronto)                           | Experimental and high energy physics             |
| Christopher J. Pritchett, Ph.D.<br>(Toronto)                 | Astronomy and astrophysics                       |
| Lyle P. Robertson, Ph.D.<br>(British Columbia)               | Experimental nuclear and particle physics        |
| Harbhajan S. Sandhu, Ph.D.<br>(British Columbia)             | Nuclear magnetic resonance in solids and liquids |
| Colin D. Scarfe, Ph.D.<br>(Cambridge)                        | Astronomy and astrophysics                       |
| George D. Spence, Ph.D.<br>(British Columbia)                | Seismology                                       |
| Jeremy B. Tatum, Ph.D.<br>(London)                           | Astronomy and astrophysics                       |
| Don A. Vandenberg, Ph.D.<br>(Australian National University) | Astronomy and astrophysics                       |
| Arthur Watton, Ph.D.<br>(McMaster)                           | Nuclear magnetic resonance in solids and liquids |
| John T. Weaver, Ph.D.<br>(Saskatchewan)                      | Geomagnetism                                     |

## PHYSICS GRADUATE COURSES

Students should consult the Department concerning the courses offered in any particular year.

**PHYS 500 (3) QUANTUM MECHANICS**

**PHYS 501 (3) NUCLEAR PHYSICS**

**PHYS 502 (3) ELECTROMAGNETIC THEORY**

**PHYS 503 (3) THEORY OF RELATIVITY**

**PHYS 504 (3) ATOMIC AND MOLECULAR SPECTROSCOPY**

**PHYS 505 (3) ADVANCED CLASSICAL MECHANICS**

**PHYS 506A (1½) PARTICLE PHYSICS: I**

**PHYS 506B (1½) PARTICLE PHYSICS: II**

**PHYS 510 (3) ADVANCED METHODS IN MATHEMATICAL PHYSICS**

**PHYS 511A (1½) TOPICS IN NUCLEAR AND PARTICLE PHYSICS: I**

**PHYS 511B (1½) TOPICS IN NUCLEAR AND PARTICLE PHYSICS: II**

**PHYS 512 (3) UPPER ATMOSPHERE PHYSICS**

**PHYS 514 (3) GAS DYNAMICS**

**PHYS 515 (3) GEOMAGNETISM AND SOLAR-TERRESTRIAL RELATIONSHIPS**

**PHYS 517 (3) NUCLEAR MAGNETIC RESONANCE**

**PHYS 518 (3) PLASMA PHYSICS**

**PHYS 519A (EOS 519A) (1½) SELECTED TOPICS IN GEOPHYSICS: I**  
(May be taken more than once for credit)

**PHYS 519B (EOS 519B) (1½) SELECTED TOPICS IN GEOPHYSICS: II**  
(May be taken more than once for credit)

**PHYS 521A (1½) INTERMEDIATE ENERGY PHYSICS: I**

**PHYS 521B (1½) INTERMEDIATE ENERGY PHYSICS: II**

**PHYS 560 (0) SEMINAR** (Grading: INP, COM, N or F)

**PHYS 580 (1-3) DIRECTED STUDIES**  
(May be taken more than once for credit)

**PHYS 599 (credit to be determined but normally in this Department 6 units) M.SC. THESIS** (Grading: INP, COM, N or F)

**PHYS 600A (1½) ADVANCED QUANTUM MECHANICS: I**

**PHYS 600B (1½) ADVANCED QUANTUM MECHANICS: II**

**PHYS 699 (credit to be determined) PH.D. DISSERTATION**  
(Grading: INP, COM, N or F)

The thesis or dissertation requirement for advanced degrees (599 or 699) applies to all students in the Department, both Physics and Astronomy.

## ASTRONOMY GRADUATE COURSES

Students should consult the Department concerning the courses offered in any particular year.

500-512 offered as A or B.

**ASTR 500 (1½ or 3) STELLAR ATMOSPHERES**

**ASTR 501 (1½ or 3) STELLAR STRUCTURE AND EVOLUTION**

**ASTR 502 (1½ or 3) BINARY AND VARIABLE STARS**

**ASTR 503 (1½ or 3) THE INTERSTELLAR MEDIUM**

**ASTR 504 (1½ or 3) GALACTIC STRUCTURE**

**ASTR 505 (1½ or 3) GALAXIES**

**ASTR 506 (1½ or 3) STELLAR POPULATIONS**

**ASTR 511 (1½ or 3) ADVANCED TOPICS IN ASTRONOMY**  
(May be taken more than once for credit)

**ASTR 512 (1½ or 3) ASTRONOMICAL INSTRUMENTATION**

**ASTR 560 (0) SEMINAR** (Grading: INP, COM, N or F)

**ASTR 580 (1-3) DIRECTED STUDIES**  
(May be taken more than once for credit)

The thesis requirement for advanced degrees (PHYS 599 or 699) applies to all students in the Department, both Physics and Astronomy.



## POLITICAL SCIENCE

The Department of Political Science offers courses of study leading to the degree of Master of Arts. Candidates are required to complete 15 units, in accordance with the following program:

1. Required courses: All M.A. students are required to take the core course in Problems in Political Analysis (POLI 505) in the first year of their program.
2. Optional courses: Regular M.A. students are required to complete 7.5 additional units of course work. Up to a total of 3 of these units may be taken from undergraduate courses at the 300 or 400 level, directed reading courses (590) or from graduate courses offered by another Department. Students enrolled in the Legislative Internship Program may not include undergraduate courses for credit in their 15 unit requirement.
3. Legislative Internship Program: Students who have been accepted as M.A. candidates in this Department and who subsequently participate in the British Columbia Legislative Internship Program may obtain 3 units of credit upon completion of a comprehensive intern research report (580) for submission to an examination committee made up of two members of the Department.
4. Thesis Proposal Requirement: Students will not be permitted to register for a second year of study unless they have submitted a thesis proposal to the members of their supervisory committee no later than the August 31st preceding their second winter session. If a thesis proposal is not approved by the student's supervisory committee before October 15th of the second winter session, the student will be asked to withdraw from the program.
5. Thesis: All students are required to submit a thesis worth 6 units of credit.
6. Length of program: Full time students will normally be expected to complete the M.A. degree within 24 months of their first registration.
7. Admission: The program is open to students with at least a B+ (6.50) average in their last two years of study leading to a degree.

Applicants with insufficient preparation in political science may be required to complete additional course work. Normally this will entail a non-degree undergraduate unclassified year.

### Concentration in Contemporary Social and Political Thought (CSPT):

This interdisciplinary program is open to selected students in Political Science and Sociology. Students must meet the core graduating requirements of the individual departments.

The Graduate Adviser in each department should be consulted for details. To complete the CSPT program in Political Science a student must complete the 15 units of requirements for an M.A. in Political Science (including a thesis for POLI 599 in the field of CSPT), plus at least 3 units of CSPT 500.

Admission to the program in CSPT is subject to the written approval of the Program Director. Applicants must already have been accepted for the MA program in Political Science.

The requirements for the program in the departments of Sociology differ from those in Political Science.

### Faculty and Current Research Interests

Robert E. Bedeski, Ph.D.  
(California, Berkeley)

East Asia (China, Japan, Korea) — comparative politics, foreign policy, and political thought; theories of revolution, developmental and post-industrial states; environmental and human security

Colin J. Bennett, Ph.D.  
(Illinois)

Comparative politics and public policy (advanced industrial countries); American government and politics; information and communications policy

Somer Brodribb, Ph.D.  
(Toronto)

Political theory; feminist theory and politics; women's social and political thought; contemporary French theories of ideology and culture; social movements and the state

Ronald I. Cheffins, Q.C., LL.M.  
(Yale)

A. Claire Cutler, Ph.D.  
(British Columbia)

Radhika Desai, Ph.D.  
(Queen's)

Warren Magnusson, D.Phil.  
(Oxford)

J. Terence Morley, Ph.D.  
(Queen's)

Norman J. Ruff, Ph.D.  
(McGill)

R.B.J. (Rob) Walker, Ph.D.  
(Queen's)

Michael C. Webb, Ph.D.  
(Stanford)

Jeremy Wilson, Ph.D.  
(British Columbia)

The Canadian constitution and legal system; Canadian government and politics, with special reference to the judiciary, the executive, and federalism

International relations theory; international law and organization; private international trade law; human rights

Capitalist development and underdevelopment, theories and ideologies of; political parties; fundamentalism; comparative politics (advanced industrial and developing), South Asia, Africa and Europe

Contemporary social and political thought; urban and local politics; social movements; theories of the state

Legal and judicial process: Canadian parties and pressure groups; the law and conventions of the Canadian constitution; subnational cross-border linkages between Canada and the U.S.A.

B.C. provincial politics and public policy; federalism; comparative electoral systems and political representation

Contemporary political and social thought; theories of discourse, ideology and culture; philosophy of social science; international political theory; concepts of space and time in political thought; modernity/postmodernity

International political economy; international relations theory; North-South relations; Canadian foreign policy

British Columbia politics and government; environmental and natural resources policy; elections and public opinion

## GRADUATE COURSES

Courses marked with an asterisk (\*) will be offered on a rotating basis subject to enrolment and the availability of faculty.

### POLI 505 (1½) PROBLEMS OF POLITICAL ANALYSIS

An examination of theoretical viewpoints in the study of politics.

### \*POLI 506 (1½) APPROACHES TO POLITICAL ANALYSIS

A review of the major traditions of political analysis.

### \* POLI 507 (1½) PUBLIC POLICY

### \* POLI 508 (1½) COMPARATIVE POLITICS

### \* POLI 509 (1½) POLITICAL THEORY

### \* POLI 516 (1½) CANADIAN POLITICS

### \* POLI 533 (1½) THEMES IN CONTEMPORARY POLITICS

A seminar dealing with an important theme or themes in contemporary politics. The content will vary from year to year. (May be repeated for credit with permission of the Graduate Advisor)



**\* POLI 540 (1½) INTERNATIONAL RELATIONS****POLI 580 (3) LEGISLATIVE INTERNSHIP REPORT**

(Grading: INP, COM, N or F)

**\* POLI 590 (1½ or 3) DIRECTED READINGS**

590A and 590B — Political Theory

590C and 590D — Comparative Politics

590E and 590F — Public Law

590G and 590H — Contemporary Political Analysis

590J and 590K — International Relations

590L and 590M — Public Administration

590N and 590P — Canadian Federal and Provincial Politics

(May be repeated for credit, provided course content differs, to a maximum of 3 units)

**POLI 599 (6) THESIS**

(Grading: INP, COM, N or F)

**CONTEMPORARY SOCIAL AND POLITICAL THOUGHT****CSPT 500 (1½) CONTEMPORARY SOCIAL AND POLITICAL THOUGHT**

An interdisciplinary seminar on topics such as language and social theory, tradition and modernity, democracy and freedom, global order and disorder, structuralism and post structuralism, feminism and Marxism. (Content will vary from term to term) (May be repeated for a maximum of 6 units of credit) (Open to M.A. or Ph.D. students in the Social Sciences and the Humanities with permission of the Director of the Program) S(3-0)

**CSPT 590 (1½ or 3) DIRECTED READINGS**

Individual study, under the direction of a participating faculty member, of a topic or topics in contemporary social and political thought. (A student in the Program may substitute POLI 590 or SOCI 590 for CSPT 590, with permission of the Director of the program) (May be repeated for credit, provided course content differs)

## PSYCHOLOGY

The Department of Psychology offers programs leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. Generally only students planning to continue their studies for a Ph.D. degree are accepted. The graduate program emphasizes training of research skills. The program is oriented toward the Ph.D. degree although students must obtain a Master's degree which usually requires two years of full time study beyond the Bachelor's degree. The Ph.D. involves at least two years of study beyond the Master's degree of which at least one entire winter session must be as a full time student.

Training leading to the Ph.D. degree is offered in Clinical (with specialization in Neuropsychology or Life-Span Development and Aging), Cognitive, Experimental Neuropsychology, Life-Span Development and Aging, Behavioural Neuroscience, as well as various areas of Environmental, Experimental and Social Psychology.

**Admission Requirements**

An undergraduate degree in Psychology or its equivalent with at least a B+ average in the last two years leading to the degree is recommended. Applicants should have taken at least one course in applied statistics and courses in major areas of psychology such as learning/cognition, physiological/neuropsychology, and social/personality/abnormal psychology.

**Graduate Record Examination:** Applicants should provide scores from the aptitude portion (verbal, quantitative, and analytic) of the Graduate Record Examination (G.R.E.). No specific cut-off scores are used to determine acceptability. Students whose first language is not English must take the Test of English as a Foreign Language and receive a score of at least 600.

**Personal Letter:** Applicant must also provide a personal letter that: (a) identifies the primary area of specialization desired, (b) describes areas of research interest, (c) names at least two faculty members with whom the applicant wishes to work, (d) gives details of current activity (e.g., courses in progress), and (e) indicates whether financial support will be required.

Admission requires that a faculty supervisor is available (see item (c) under Personal Letter in paragraph above).

**Clinical Applicant:** Applicants intending to pursue clinical training with specialization in neuropsychology or life-span development and aging must declare their intent at the time of application under "Field of Study". Such applications will then be reviewed by the admissions committee for the clinical program based on (a) background, interest and experience, (b) competitiveness of transcripts with other applicants for clinical training, and (c) a personal interview focusing on interests and suitability for clinical training. The academic progress and clinical aptitude of students admitted to clinical training will be reviewed annually.

**Deadline:** The application, letters of reference, and personal letter should be received by February 1 for admission in September of that year. The G.R.E. scores may be accepted until February 20. Later applications are not likely to be considered for financial assistance.

**Program Requirements**

**Undergraduate Competence:** Students with insufficient background will be asked to demonstrate competence in the areas listed above (under Admission Requirements) by the end of the first year of graduate studies. Competence may be demonstrated in various ways such as enrolling in undergraduate courses or by course challenge.

**Thesis:** A thesis or dissertation is a requirement of all degree programs.

**Other Requirements:** In addition to the above requirements, and unit requirements set by the Faculty of Graduate Studies, students must satisfy a methodology requirement involving 400 or 500 level courses in statistics and methods, and, in the case of Master's students, participate during their first year in a Research Apprenticeship which is typically overseen by the student's supervisor. Other departmental requirements are specific to particular programs or supervisors.

**Financial Aid**

All applicants are considered for University fellowships but there are many more qualified applicants than there are awards. A limited number of teaching assistantships are available from the department for up to eight months' work. Teaching assistantships are typically not available to students during their first year in the department. Some faculty members employ students as research assistants. All eligible students are encouraged to apply for funding from federal agencies (NSERC, SSHRC, MRC).

**Faculty and Major Areas of Research**

|   |   |
|---|---|
| Loren Acker, Ph.D.<br>(Calif., Los Angeles)   | Child behavioural development; University teaching technologies and innovations; general behaviour analysis |
| Janet Beavin Bavelas, Ph.D.<br>(Stanford)     | Social interaction; verbal and nonverbal communication; methodology   |
| Daniel N. Bub, Ph.D.<br>(Rochester)           | Cognitive neuropsychology   |
| Caroline L. Collins, Ph.D.<br>(Stanford)      | Gerontology; self-presentation; gender; verbal and non-verbal communication                                 |
| Michael E. Corcoran, Ph.D.<br>(McGill)        | Neuropsychopharmacology; experimental epilepsy and neural plasticity  |
| Louis D. Costa, Ph.D.<br>(Columbia)           | Human neuropsychology and clinical psychology   |
| Roger A. Dixon, Ph.D.<br>(Pennsylvania State) | Life-span development and aging; cognitive psychology; reading and prose memory                             |
| Pam Duncan, Ph.D.<br>(Wisconsin)              | Clinical psychology; sexual deviation   |



|   |   |
|---|---|
| Marion F. Ehrenberg, Ph.D.<br>(Simon Fraser)                      | Clinical psychology; divorcing families; adolescent psychopathology                               |
| Nancy Galambos, Ph.D.<br>(Pennsylvania State)                     | Adolescent development; parent-child relations; work and the family                               |
| Robert D. Gifford, Ph.D.<br>(Simon Fraser)                        | Environmental; social-personality   |
| Bram Goldwater, Ph.D.<br>(Bowling Green)                          | Experimental and applied behaviour analysis; educational technology; human psychophysiology       |
| Roger E. Graves, Ph.D.<br>(Massachusetts Institute of Technology) | Human neuropsychology: clinical and experimental  |
| Ronald A. Hoppe, Ph.D.<br>(Michigan State)                        | Language and social psychology  |
| David F. Hultsch, Ph.D.<br>(Syracuse)                             | Adult development and aging; memory and cognition   |
| Michael A. Hunter, Ph.D.<br>(Simon Fraser)                        | Developmental psychology; statistics and research design  |
| Michael Joschko, Ph.D.<br>(Windsor)                               | Human neuropsychology; clinical child psychology  |
| Helena Kadlec, Ph.D.<br>(Purdue)                                  | Quantitative psychology; visual perception and attention; cognitive neuroscience                  |
| Kimberly A. Kerns, Ph.D.<br>(Chicago Medical School)              | Pediatric neuropsychology, clinical psychology, attention and memory disorders                    |
| D. Stephen Lindsay, Ph.D.<br>(Princeton)                          | Memory and cognition; eyewitness memory; children's memory  |
| C.A. Elizabeth Lüüs, Ph.D.<br>(Iowa State)                        | Eyewitness testimony; social psychology; social cognition   |
| Michael E.J. Masson, Ph.D.<br>(Colorado)                          | Cognitive psychology; memory, language comprehension, skill acquisition and univariate statistics |
| Catherine A. Mateer, Ph.D.<br>(Western Ontario)                   | Clinical neuropsychology, cognitive rehabilitation, memory and attention                          |
| Richard B. May, Ph.D.<br>(Claremont)                              | Learning; memory; cognitive development   |
| Clare K. Porac, Ph.D.<br>(New School for Social Research)         | Visual perception; lateral preferences; handedness  |
| Lorne Rosenblood, Ph.D.<br>(Ohio State)                           | Attitude theories; social affiliation; research design  |
| Marsha G. Runtz, Ph.D.<br>(Manitoba)                              | Clinical psychology; child maltreatment; family violence; psychology of women                     |
| Ronald W. Skelton, Ph.D.<br>(British Columbia)                    | Neurophysiology learning and memory   |
| Esther H. Strauss, Ph.D.<br>(Toronto)                             | Neuropsychology; developmental psychology   |
| Charles W. Tolman, Ph.D.<br>(Washington)                          | Experimental psychology; history, theory, and methods   |

## GRADUATE COURSES

Students must consult the Department concerning courses offered in any year.

### PSYC 501 (1-6) PRACTICUM IN APPLIED PSYCHOLOGY

Practicum in an applied setting. 1 unit of credit equals approximately 100 hours.  
(Grading: INP, COM, N or F)

### PSYC 502 (1½-4½) RESEARCH APPRENTICESHIP

(May be taken more than once provided course content differs) (The student must consult with the instructor about the area of study prior to registration and complete a *pro forma*. A maximum of 4½ units of 502 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee)

### PSYC 503 (1-6) PRACTICUM IN CLINICAL PSYCHOLOGY

Practicum in a clinical setting. 1 unit of credit equals approximately 100 hours. (*Prerequisite*: Acceptance to clinical program and approval of clinical program practicum coordinator)

(Grading: INP, COM, N or F)

### PSYC 504 (1½-6) INDIVIDUAL STUDY

(May be taken more than once provided course content differs) (The student must consult with the instructor about the area of study prior to registration and complete a *pro forma*. A maximum of 6 units of 504 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee)

### PSYC 505 (1-6) CLINICAL INTERVENTION PRACTICUM

Practicum in a clinical setting with emphasis on various forms of intervention. (*Prerequisite*: Acceptance to clinical psychology graduate program) (1 unit of credit is equivalent to approximately 100 hours)

(Grading: INP, COM, N or F)

Courses 507 to 531 inclusive may be taken more than once, provided course content differs, to a maximum of 6 units at the discretion of the student's Supervisory Committee. Each area carries 1½ units of credit. The specific content area will be designated prior to registration.

### PSYC 507 (1½) PERSONALITY

### PSYC 508 (1½) MOTIVATION

### PSYC 509 (formerly 509/510) (1½) HISTORY AND SYSTEMS OF PSYCHOLOGY

### PSYC 510 (1½) THEORIES OF PSYCHOLOGY

### PSYC 511 (1½) VISUAL PERCEPTION

### PSYC 513 (1½) QUANTITATIVE ANALYSIS

### PSYC 517 (1½) RESEARCH METHODS IN PSYCHOLOGY

### PSYC 518 (1½) PSYCHOMETRIC METHODS

### PSYC 519 (1½) SOCIAL PSYCHOLOGY

### PSYC 526 (1½) SOCIAL PROCESSES

### PSYC 527 (1½) RESEARCH METHODS IN SOCIAL PSYCHOLOGY

### PSYC 531 (1½) ENVIRONMENTAL PSYCHOLOGY

### PSYC 532 (1½) APPLIED MULTIPLE REGRESSION

The course presents a model-comparison approach to the analysis of a single dependent variable. This integrated approach aims to teach students how to ask intelligent questions of their data, and to answer those questions using the general linear model. In particular students will learn about simple and multiple regression involving continuous independent variables, categorical independent variables (ANOVA designs), and mixtures of the two (covariance analysis). Also covered will be outlier detection, testing of model assumptions, data transformation, and repeated measures models.

### PSYC 533 (1½) APPLIED MULTIVARIATE ANALYSIS

The course will extend the material covered in Psychology 532 to the situation in which there are multiple dependent variables. The result is multivariate multiple regression. Then the additional technique of principle component analysis will be added, and the two procedures combined to derive canonical correlation analysis, multivariate analysis of variance, discriminant function analysis, and redundancy analysis. In addition the common factor model of factor analysis will be introduced.



**PSYC 534 (1½) UNIVARIATE DESIGN AND ANALYSIS**

The course will examine various factorial designs for univariate data from an advanced perspective. For a number of frequently used designs (e.g., completely randomized, randomized block, and repeated measures), planned comparisons, tests of the models' assumptions, expected mean squares, and interpreting interactions (e.g., simple main effects) will be covered. Students will be required to learn and use statistical software packages, such as SPSS and SAS. Time and interest permitting, a brief introduction to other modelling procedures for response time and accuracy data will be offered.

**PSYC 540 (formerly 515A) (1½) HUMAN NEUROPSYCHOLOGY: BASIC TOPICS**

Survey of major topics and issues in clinical and experimental neuropsychology, including a historical introduction, and recent material. Topics may include aphasia, agnosia, apraxia, agraphia, other clinical syndromes, hemispheric specialization, etc.

**PSYC 541 (formerly 541/544) (1½) RESEARCH DESIGN AND METHODS IN NEUROPSYCHOLOGY**

Seminar on current research methodologies including presentation of actual research by students, faculty, and visiting scientists. Students develop and write original research proposals using standard journal format.

**PSYC 542 (formerly 520B) (1½) DEVELOPMENTAL NEUROPSYCHOLOGY**

Survey of early life neural development, disorders of development and their consequences, and disturbances of neurobehavioral function in infancy, childhood and in long term follow up. Special emphasis will be on specific conditions, e.g. prematurity, anoxia, head injury, and specific syndromes, e.g. epilepsy, language and learning disorders, etc.

**PSYC 543 (formerly 535B) (1½) HUMAN NEUROANATOMY**

Introduction to neuroanatomy, focussing on the brain, and including laboratory work.

**PSYC 545 (formerly 524C) (3) NEUROPSYCHOLOGICAL ASSESSMENT**

Survey of specific areas and techniques of neuropsychological assessment including interviewing, test administration, case formulation, and report writing. Students must conduct, under staff supervision, detailed neuropsychological assessment of clinical cases. (*Prerequisites:* 540, 584 and 585 and acceptance to clinical psychology graduate program) (Grading: INC, COM, N or F)

**PSYC 546 (formerly 624A) (3) ADVANCED NEUROPSYCHOLOGICAL ASSESSMENT**

Survey of specific areas and techniques of assessment and interviewing, consultation and report writing, including 10 supervised case studies. (*Prerequisites:* 545, 580, 589 and acceptance to clinical psychology graduate program) (Grading: INC, COM, N or F)

**PSYC 547 (formerly 535D) (1½) REHABILITATION IN NEUROPSYCHOLOGY**

Introduction to theory and techniques associated with recovery from brain injury. Topics include the psychological meaning of disability, and the relationship between impairment, disability, and handicap. Current techniques in cognitive rehabilitation will be reviewed in the broader context of rehabilitation in general. May include practicum in various rehabilitation settings. (*Prerequisite:* Admission for clinical training)

**PSYC 548 (formerly 515D) (1½) SPECIAL TOPICS IN NEUROPSYCHOLOGY**

(May be taken more than once up to a maximum of 6 units provided course content differs)

**PSYC 550 (formerly 512A) (1½) PHYSIOLOGICAL PSYCHOLOGY: INTRODUCTION**

Seminar discussing selected topics concerning fundamental neurobiological processes underlying behavior, including synaptic transmission, motor and sensory activity, motivation, neural plasticity, and theories of neural organization.

**PSYC 551 (1½) NEUROPSYCHOPHARMACOLOGY**

Seminar discussing the neurochemical bases of brain function and of the effects of psychoactive drugs, with emphasis on the role played by chemical neurotransmitters and the system of neurons that release them.

**PSYC 552 (formerly 512D) (1½) SPECIAL TOPICS IN PHYSIOLOGICAL PSYCHOLOGY**

(May be taken more than once up to a maximum of 6 units provided course content differs)

**PSYC 560 (formerly 560A) (1½) CONCEPTS AND THEORIES OF DEVELOPMENTAL PSYCHOLOGY**

Seminar review of the major models and theories of psychological development across the life span. Discussion focuses on differences among the models and theories on central issues such as concepts of change and development, nature-nurture, and individual-environment interactions.

**PSYC 561 (formerly 560B) (1½) RESEARCH METHODS IN DEVELOPMENTAL PSYCHOLOGY**

Seminar review of research designs for the study of psychological development across the life span. Specific topics include cross-sectional, longitudinal, sequential, and experimental approaches. In addition, issues related to sampling and measurement are considered.

**PSYC 562 (formerly 560C) (1½) INFANCY AND CHILDHOOD**

Seminar review of theory and research examining psychological development from infancy through childhood. Special topics include personality/temperament, attachment, parent-child relations, and socialization process. Emphasis is placed on the role of the context in individual development.

**PSYC 563 (formerly 560D) (1½) ADULT DEVELOPMENT AND AGING**

Seminar review of theory and research examining psychological processes during adulthood and aging. Specific topics include memory, intelligence, problem solving, personality, social processes, and mental health. Attention is also given to the biological and sociocultural contexts of these developments.

**PSYC 564 (formerly 561A) (1½) STATISTICAL METHODS IN DEVELOPMENTAL PSYCHOLOGY**

Examination of statistical methods for the analysis of change. Specific topics include change scores, canonical correlation, multivariate analysis of variance, and factor analysis. (*Prerequisite:* 400A, 400B, and 561)

**PSYC 565 (formerly 561B) (1½) COGNITIVE DEVELOPMENT IN ADULTHOOD AND AGING**

Seminar review of theory and research examining gains and losses in various cognitive skills from young adulthood to old age. Traditional experimental, psychometric, and cognitive science approaches are considered. Specific topics include age-related change in memory, intelligence, problem solving, reading skills, and as well as practical and social cognition.

**PSYC 566 (formerly 561C) (1½) PERSONALITY AND ADJUSTMENT IN ADULTHOOD AND AGING**

Seminar review of theory and research examining personality change, stress, coping, and adjustment across the adult life span. Specific topics include the cases for and against personality change, personality as a mediator of other behavior, stress, coping, life events, and mental health in adulthood.

**PSYC 567 (1½) DYSFUNCTIONAL DEVELOPMENT IN ADULTHOOD AND AGING**

Seminar review of theory and research examining dysfunctional and pathological processes in later life. Specific topics include dementia, depression, personality disorders, alcoholism and other addictions, and suicide. Attention will be given to issues of etiology, diagnosis, treatment, and impact on caregivers.

**PSYC 569 (formerly 562) (1½) SPECIAL TOPICS IN LIFESPAN DEVELOPMENT**

Topical seminars on specialized issues related to lifespan development and aging. (May be taken more than once up to a maximum of 6 units provided course content differs)



**PSYC 570 (LING 570) (1½ or 3) PSYCHOLINGUISTICS**

A seminar offered in collaboration with the Department of Linguistics. Selected topics of interest in understanding the comprehension and production of natural language are examined. The most recent topics have been sentence processing, discourse analysis, linguistic inference and the resolution of ambiguity, and the development of cognitive science interests in reasoning and discourse processes as well as the structure of mental representations.

**PSYC 571 (LING 571) (1½ or 3) DEVELOPMENTAL PSYCHOLINGUISTICS**

A seminar offered in collaboration with the Department of Linguistics. Selected topics of interest in understanding the acquisition of the child's first language in the areas of phonological and grammatical abilities, as well as the child's knowledge of semantic systems and discourse rules. Recent topics have been the development of conversational abilities in children, including turn taking, questioning and answering, and politeness and negotiation in speech acts.

**PSYC 575 (formerly 506) (1½) COGNITIVE PSYCHOLOGY**

Seminar of major topics in cognitive psychology, including pattern recognition, attention, memory categorization, language processing, problem solving, and decision making. Emphasis will be on current theories and methodologies.

**PSYC 576 (1½) MEMORY AND COGNITIVE PROCESSES**

Exploration of current theories and research involving memory and cognitive processes. Emphasis will be on the relationship between empirical research and theory construction. Examples of formal theoretical models and modelling techniques will be discussed.

**PSYC 580 (formerly 528) (3) CLINICAL PSYCHOLOGY AND PSYCHOPATHOLOGY**

Overview of various concepts, methods, and professional issues in clinical psychology. Includes a review of the scientist-practitioner role as it has developed, a presentation of various mental disorders based on descriptive, experimental, and theoretical psychopathology, discussion of psychodiagnostic issues emphasizing the impact of gender and culture in the expression of "abnormal" behavior throughout the lifespan. (*Prerequisite:* Acceptance to clinical psychology graduate program)

**PSYC 582 (formerly 525) (1½) LEARNING DISORDERS**

Discussion of the history and current theories of learning disorders with special emphasis on subtype analysis, neuropsychological deficits, and specific forms of remediation.

**PSYC 583 (formerly 535C) (1½) PROFESSIONAL AND ETHICAL ISSUES IN CLINICAL PSYCHOLOGY**

Discussion of ethical standards for providers of psychological services and of registration requirements as required by BCPA, CPA, and APA. Includes also presentations by practicing psychologists in various specialties and of various professional and interprofessional problems encountered by the practicing psychologist.

**PSYC 584 (formerly 524A) (1½) CLINICAL ASSESSMENT: I**

Introduction to intellectual assessment with practicum. (*Prerequisite:* Acceptance to clinical psychology graduate program)  
(Grading: INC, COM, N or F)

**PSYC 585 (formerly 524B) (1½) CLINICAL ASSESSMENT: II**

Introduction to techniques of personality assessment with emphasis on projective techniques. Includes practicum. (*Prerequisite:* PSYC 584 and acceptance to clinical psychology graduate program)  
(Grading: INC, COM, N or F)

**PSYC 586 (formerly 624B) (1½) ADVANCED CLINICAL ASSESSMENT**

Advanced techniques and interpretation of clinical assessment devices with supervised case studies. (*Prerequisites:* 585 and acceptance to clinical psychology graduate program) (Grading: INC, COM, N or F)

**PSYC 587 (formerly 550) (1½) APPLIED BEHAVIORAL ANALYSIS**

This course covers basic theory and principles of behavioral psychology. Principles of behavioral development and analysis, as drawn from the literature in the experimental analysis of behavior (basic research) will be related to the literature in Applied Behavior Analysis, including behavior modification. In some years, a practicum may be included.

**PSYC 588 (formerly 516) (1½) CHILD PSYCHOTHERAPY**

Introduction to different theoretical approaches to child psychotherapy and a discussion of techniques; supervised experience will be offered in subsequent sections. (May be taken more than once up to a maximum of 4½ units provided course content differs)

**PSYC 589 (formerly 516) (1½) ADULT PSYCHOTHERAPY**

Introduction to different theoretical approaches in adult psychotherapy and a discussion of techniques; supervised experience will be offered in 590. May be taken more than once to a maximum of 4½ units provided course content differs. (*Prerequisite:* Acceptance to clinical psychology graduate program)

**PSYC 590 (1½-4½) ADULT PSYCHOTHERAPY: APPLIED**

Practicum in various forms of adult psychotherapy and other forms of intervention. (*Prerequisite:* PSYC 589 and acceptance to clinical psychology graduate program) (1½ units of credit is equivalent to approximately 75 contact hours) (Grading: INP, COM, N or F)

**PSYC 591 (formerly 628) (1½) SPECIAL TOPICS IN CLINICAL PSYCHOLOGY**

(May be taken more than once up to a maximum of 6 units provided course content differs)

**PSYC 592 (formerly 528D) (1½) HYPNOTHERAPY**

Introduction to the clinical use of hypnosis. Topics include: hypnotic inductions, trance utilization, ideomotor responses, and use of language in hypnosis. Strategies for treatment of specific clinical problems will be examined.  
(Grading: INC, COM, N or F)

**PSYC 593 (1½) COMMUNITY MENTAL HEALTH**

Addresses major client, service and system issues. The student is equipped with the knowledge necessary to plan, develop and evaluate community mental health services and programs. Particular emphasis will be placed on ecological validity issues associated with the development and implementation of community mental health services, as well as on the definition and measurement of client and system outcomes. Students will have the opportunity to carry out an actual evaluation project. (Permission of instructor)

**PSYC 599 (3-6) THESIS**

(Grading: INP, COM, N or F)

**PSYC 602 (1-6) INDEPENDENT RESEARCH**

(May be taken more than once provided course content differs) (The student must consult with the instructor about the area of study prior to registration and complete a *pro forma*. A maximum of 6 units of 602 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee)

**PSYC 603 (4-6) ADVANCED CLINICAL PRACTICUM**

Practicum for a minimum of 400 hours in an approved clinical setting (1 unit of credit equals approximately 100 hours) (*Prerequisites:* Acceptance to clinical program and approval of clinical program practicum coordinator)  
(Grading: INP, COM, N or F)

**PSYC 604 (1½-6) INDIVIDUAL STUDY**

(May be taken more than once provided course content differs) (The student must consult with the instructor about the area of study prior to registration and complete a *pro forma*. A maximum of 6 units of 604 may be taken in any one Winter Session at the discretion of the student's Supervisory Committee)

**PSYC 605 (1½ or 3) PRACTICUM IN THE TEACHING OF PSYCHOLOGY**

Teaching practicum with individual instructors of the department in areas of potential teaching interest for the student. (*Pro forma*)  
(Grading: INC, COM, N or F)

**PSYC 606 (15) CLINICAL INTERNSHIP**

Full-year internship with 1600 to 2000 hours of supervised practical experience in settings approved by the committee on clinical training. (*Prerequisite:* Completion of clinical course sequence and approval by Committee on clinical training) (Grading: INP, COM, N or F)

**PSYC 699 (3-15) Ph.D. DISSERTATION**

(Grading: INP, COM, N or F)



## PUBLIC ADMINISTRATION

### MASTER OF PUBLIC ADMINISTRATION PROGRAM

The School of Public Administration offers both full time and part time programs of studies leading to the degree of Master of Public Administration (M.P.A.). The multidisciplinary program is intended for practising or prospective managers who wish to acquire, or update, the skills necessary for effective and responsible public sector management and policy analysis.

#### Admission

Candidates will have a four year baccalaureate degree from a recognized university, or equivalent qualifications, with an academic standing acceptable to the School and the Faculty of Graduate Studies. In general, this would mean a very high second class standing or better in the final two years of the undergraduate degree. In exceptional cases the School, with the agreement of the Dean of the Faculty of Graduate Studies, may waive this requirement on the presentation of other evidence, such as substantial professional experience, which indicates that the candidate will complete the program successfully.

Because the M.P.A. program is open to students from a broad range of disciplines, the School anticipates applications from persons with widely varied undergraduate backgrounds. Although there is no formal requirement with respect to the specific nature of undergraduate courses, makeup course work may be required where lack of an adequate background is judged to be a handicap for the student.

A grade of 'B' or better within the past 10 years is required in Economics 201 or equivalent; challenge exams are offered by the School to those admitted without sufficient relevant documentation.

If the candidate has neither passed the course nor the challenge examinations, Economics 201, or equivalent, must be taken during a prescribed period; but it cannot be counted for credit toward the M.P.A. degree.

Applicants are encouraged to submit whatever other evidence of suitability for admission they feel is relevant. This could include the Graduate Management Admission Test, the Graduate Record Examination, academic records from nondegree courses, a professional résumé and TOEFL (for students whose first language is not English).

A supplementary page should be used to describe the relevance of prior work experience and the reason for seeking an M.P.A. degree. Often an interview is arranged with the Graduate Adviser or designate.

Students completing an undergraduate degree in preparation for entry to the M.P.A. program, or otherwise taking upper level undergraduate courses to strengthen their application, are urged to consult the School for advice concerning an appropriate program of study.

Please note: For admission in September, the application deadline is May 1; for January admission, the application deadline is October 15.

Please note: Effective September, 1992, all applicants who do not possess a Canadian Baccalaureate Degree, will be required to write and submit results for either the Graduate Management Admissions Test or the Graduate Record Examination.

### PROGRAM OF STUDIES

Upon admission, each student will meet with the Graduate Adviser or designate to establish a program of study to meet the M.P.A. degree requirements. After being approved by the Dean of Graduate Studies, this study plan provides the basis for granting the degree, following satisfactory completion of the courses within the stipulated time limit.

The regular degree program consists of 30 units, including 13½ units of foundation courses numbered 500-516, 10½ units of electives numbered 521 and above, followed by 519, 520 and 598 (6 units). Entering students who possess a directly relevant academic background or who pass an appropriate challenge exam or who possess appropriate senior administrative experience may be granted advanced standing in designated courses numbered 500 to 516. Individual programs of study may differ widely, but in no case will the M.P.A. degree be awarded on the basis of fewer than 18 units of study (including the report requirement) accepted for graduate credit at the University of Victoria.

A full time student with little relevant academic or work experience, who is not involved in the Cooperative Education option, will normally need 20 months to complete the requirements for the degree. One who is extremely well prepared academically or has substantial relevant

work experience may require only 12 months of full time study. The program also may be undertaken on a part time basis. Transfer to full time status, and vice versa, is automatically available after the first term of study in the M.P.A. program.

#### The Report Requirement (Administration 598):

The report is expected to be a substantial analysis of a significant policy issue or management problem. It is to be prepared individually by the student in consultation with an adviser, who shall be a member of the School faculty. The adviser will review the first draft, and approve a final version for submission to the Oral Examination Committee which will include the adviser, another member of the School faculty, a member of the Faculty of Graduate Studies from outside the School, and at least one professional administrator.

#### Concurrent LL.B./M.P.A. Program

Students who apply and are accepted into both the Faculty of Law's LL.B. program and the School of Public Administration's M.P.A. program may earn both degrees simultaneously with modified requirements for each. The M.P.A. requirements for the combined degree program include completing or receiving advanced standing in ADMN 500, 502A, 502B, 503, 507 and 512; plus 7½ units of electives numbered ADMN 522 or higher; plus ADMN 519, 520 and 598. Regardless of how much advanced standing is granted, the minimum requirements are the same as for the regular M.P.A. program: at least 18 units, of which 12 units must be from courses numbered ADMN 519 and above.

Normally, the combined degree program will require four regular academic years to complete. The first year is devoted entirely to the required first year Law curriculum. During the second year, students will complete 6 units of required second year Law courses plus the Public Administration foundation courses (ADMN 500, 502A, 502B, 503, 507 and 512). The third and fourth years are used to complete LL.B. and M.P.A. elective courses, The Public Law Term, and ADMN 519, 520 and 598.

Students may reduce the time in the program by enrolling in some M.P.A. courses during the Summer Term. Alternatively, students may gain valuable work experience by entering the Cooperative Education option (see below). The three coop work terms are scheduled in consultation with the School's Graduate Adviser.

For information about the Faculty of Graduate Studies rules governing the combined LL.B./M.P.A. degree program, see 2.11 in the general regulations section for the Faculty. Further information on the program may be obtained from either the School of Public Administration or the Faculty of Law.

#### Performance Requirements:

See Graduate Studies Regulations 5.4, Academic Performance.

#### Cooperative Education:

The Cooperative Education option within the M.P.A. program provides an opportunity for Public Administration students to obtain relevant work experience while completing their degree requirements. Students who successfully complete three Work Terms and satisfy the academic requirements of the M.P.A. degree program offered by the School of Public Administration will receive a notation to this effect on their transcripts at graduation. Prior work experience is not accepted for work term credit.

Applications for admission to the Cooperative Program should be submitted not later than the end of the second week of the student's first term in the M.P.A. program. Decisions on admission are normally made by the fifth week of classes. The Cooperative Education option is only available to full time students; part time students may apply for admission on the understanding that they will be required to change to full time status for the remainder of their program. For Co-op purposes, a full time student is one normally enrolled in 6 units of course work prior to the first and subsequent co-op terms. Normally, part time students will be required to become full time prior to the first co-op term.

#### Language Skills:

Students are strongly recommended to maintain or improve their fluency in French while in the program. A successful public service career in Canada is increasingly dependent on an ability to function in Canada's two official languages.



## GRADUATE COURSES AND REQUIREMENTS

The program of studies leading to the M.P.A. degree has been arranged in four course blocks to facilitate learning and program planning.

### Course Block 1 Foundation Courses

### Course Block 2 Key Electives

### Course Block 3 Other Elective Seminars

### Course Block 4 Required Seminars and Management Report

Students are normally expected to complete all Block 1 courses before proceeding further as groupings of these courses are prerequisites for courses in Blocks 2, 3 and 4. Students are also encouraged to read carefully the detailed descriptions of courses in the upper blocks, to ensure that they have acquired the specific prerequisites for their desired program of study.

#### Course Block 1

- 500 Quantitative Analysis I
- 502A Research Methods: I
- 502B Research Methods: II
- 503 Economic Methods in Policy Analysis
- 504 Political Analysis
- 507 Management and Organizational Behaviour
- 510 Law and Administration
- 512 Introduction to Accounting and Financial Management in the Public Sector
- 516 Written Communications

Admn 500 through 516 have graduate course credit only for M.P.A. students.

#### Course Block 2

These courses are offered on a regularly scheduled basis by the School of Public Administration. The following courses provide essential material for management and policy analysis.

- 524 Information Systems Management
- 531 Human Resource Management
- 537 Program Evaluation
- 541 Budgeting, Control and Auditing in the Public Sector and the Private Non-Profit Sector
- 544 Cost Benefit Analysis
- 578 Advanced Methods of Analysis

#### Course Block 3

These courses are offered subject to student demand and faculty availability.

- 522 Seminar on Public Transportation Issues
- 523 Contemporary Topics in Administration
- 525 Labour Relations and Collective Bargaining
- 526 Information Technology and Management
- 527 Decision and Risk Analysis
- 528 Project Management
- 529 Organizational Development
- 530 Organizational Theory and Job Design
- 532 The Management of Change
- 533 Public Sector Marketing and Policy Implementation
- 535 Regulation and Competition Policy
- 539 Managing for Excellence in the Public Sector
- 541 Management Control, Auditing, Privacy and Security in the Public Sector
- 542 Cost Accounting in the Public Sector
- 543 Developmental Administration
- 545 Local Government Organization, Operation and Finance
- 546 Issues in Management of Local Government
- 547 Program Implementation
- 549 Processes and Problems in the Formation of Economic Policy
- 551 Administrative Law
- 552 Federalism and Federal-Provincial Relations in Canada
- 556 Machinery of Government
- 563 Aspects of Research Design
- 564 Seminar on Social Policy Issues
- 575 Coastal Resource Use, Law & Management
- 577 Strategic Planning Seminar

#### Course Block 4

These courses are required and should be taken near the end of the student's program.

- 519 Seminar in Responsible Administrative Behaviour
- 520 Management and Policy Seminar
- 598 Report Requirement

#### Faculty and Areas of Interest

Robert L. Bish, Ph.D.  
(Indiana)

Frank Cassidy, Ph.D.  
(Stanford)

Ronald I. Cheffins, Q.C., LL.M.  
(Yale)

J. Barton Cunningham, Ph.D.  
(Southern California)

James Cutt, Ph.D.  
(Toronto)

A. Rodney Dobell, Ph.D.  
(Massachusetts Institute of Technology)

Genevieve Eden, Ph.D.  
(Toronto)

Ralph Huenemann, Ph.D.  
(Harvard)

John J. Jackson, Ph.D.  
(Alberta)

Thomas A. Lambe, Ph.D.  
(Stanford)

John Langford, Ph.D.  
(McGill)

James N. MacGregor, Ph.D.  
(Victoria)

James C. McDavid, Ph.D.  
(Indiana)

James J. McRae, Ph.D.  
(Western Ontario)

Michael J. Prince, Ph.D.  
(Exeter)

Thomas K. Shoyama, LL.D.  
(British Columbia)

Harmut J. Will, Ph.D.  
(Illinois)

Local government, coastal resource management, theories of public choice

Aboriginal self government and land claims, public sector management, administrative ethics, adult education and public policy

Canadian Public Law, Canadian politics and government

Quality of working life, organizational theory, decision making, stress and motivation, entrepreneurship

Public sector finance and accounting, evaluation of public policy

Formation of public policy, philosophy of administration, environmental issues

Industrial relations, conflict management and dispute resolution, employment law

Cost benefit analysis, development policy and administration, comparative economic systems, transportation economics, international trade policy

Organizational theory, human resource management, recreation administration

Application of quantitative methods, with particular regard to urban transportation systems

Canadian politics and government, machinery of government, administrative ethics

Organizational behaviour, human information processing

Urban administration, program evaluation, statistical methods

Economic analysis of public policy; regulation and competition policy; international trade and investment policy; transportation policy; taxation and income support policy

Social policy formulation and implementation, retirement income security, theories of the welfare state, administrative politics of policy analysis

Federal Provincial Relations

Accounting, auditing, control, expert, management information, and security systems

## GRADUATE COURSES

(Administration 500 through 516 have graduate course credit only for M.P.A. students. All seminars 522 and above are offered subject to enrollment and the availability of faculty; not all will be offered every year.)



**ADMN 500 (1½) COMPUTER APPLICATIONS OF FINANCIAL MATHEMATICS**

This course provides an introduction to financial mathematics as well as technical training on using Lotus 1-2-3 and dBASEIII Plus for financial and database management.

**ADMN 502A (1½) RESEARCH METHODS: I**

An introduction to the range of skills necessary to conduct research in the public or private sectors. The course covers aspects of research design, data collection, and data analysis. Related statistical techniques are introduced including descriptive statistics, crosstabulation, and inferential statistics. Computer facilities are used to provide an introduction to the processing and analysis of research data.

**ADMN 502B (formerly 501) (1½) RESEARCH METHODS: II**

An intermediate level course in the design and analysis of applied research relevant to public sector issues. Research topics include experimental design, quasi-experimental design, field and evaluation research. Related statistical techniques and computer analysis are introduced, including analysis of variance, bivariate regression and multiple regression. (*Prerequisites:* 500 and 502A or equivalents)

**ADMN 503 (1½) ECONOMIC METHODS IN POLICY ANALYSIS**

A selective, accelerated review of microeconomic principles and modes of reasoning used by economists to analyze problems of resource allocation and the economic role of government in the economy. Issues in the general area of taxation, regulation, fiscal federalism, cost-benefit analysis, and social welfare programs will be investigated from an economic policy point of view. Entry into this course requires successful completion of Economics 201 or equivalent. (NOTE: Credit will not be given for both 503 and ECON 302)

**ADMN 504 (1½) POLITICAL ANALYSIS**

An examination of the political and governmental environment in which public administration takes place in Canada. The focus will be on those institutions and relationships most relevant to public administrators, including: the political executive, legislative, central agencies, ministries, regulatory agencies, crown corporations, interest groups, and the wider public. Municipal-level institutions will also be examined.

**ADMN 507 (1½) MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR**

This course will consider the nature of managerial work; managerial skills for improving employee performance; the nature of authority and leadership; conflict; motivation; decision making; planning; control and structuring of organizational activity.

**ADMN 510 (1½) LAW AND ADMINISTRATION**

An introduction to the constitutional and legal system of Canada. It will examine the sources of law, constitutional history, and the process of constitutional amendment. There will be a description of the legal position of parliament, the executive, and the functioning of the courts. Special emphasis will be placed on delegation of legislative and judicial powers. Judicial decisions, the rule of law and the legal liability of the public servant will also be examined.

**ADMN 512 (1½) INTRODUCTION TO ACCOUNTING AND FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR AND THE PRIVATE NON-PROFIT SECTOR**

An introduction to financial accounting and accountability in the public sector and the private non-profit sector; the nature of financial statements, the classification of transactions and the derivation of financial statements and analysis of financial statements.

**ADMN 516 (1½) WRITTEN COMMUNICATIONS**

Advanced skills in written and oral presentation of material for public sector analysis and decision making. Preparation of briefing notes, discussion papers, Cabinet memoranda, Treasury Board submissions, interministry and intraministry correspondence, speeches, and press releases.

**ADMN 519 (1½) SEMINAR IN RESPONSIBLE ADMINISTRATIVE BEHAVIOUR**

This course examines ethical dilemmas faced by public servants in the course of exercising administrative discretion, making policy choices and delivering services. Issues such as political neutrality, conflict of interest, accountability, confidentiality and the protection of privacy will be featured. Different approaches to ethical reasoning will be introduced. The primary purpose is to provide each participant with the opportunity, first, to reflect on the values and rules to which he or she subscribes and, second, to develop a capacity for justifying difficult ethical choices. (*Prerequisites:* 500 through 516)

**ADMN 520 (1½) MANAGEMENT AND POLICY SEMINAR**

A seminar designed to apply the skills and knowledge acquired in the MPA program to practical questions of public policy analysis and management. (*Prerequisites:* 500 through 516)

**ADMN 522 (1½) SEMINAR ON PUBLIC TRANSPORTATION ISSUES**

This course investigates policy questions related to the technical, economic and political aspects of the major transportation systems in Canada.

**ADMN 523 (1½) CONTEMPORARY TOPICS IN ADMINISTRATION**

A study of selected topics drawn from the current literature in Public Administration or related fields. Students may be permitted to take Administration 523 more than once for credit, provided the course content is different from that previously taken.

**ADMN 524 (1½) INFORMATION SYSTEMS MANAGEMENT**

This course focuses on management and user issues. Topics will include conceptual foundations, structure and technology of Management Information Systems, MIS administration, analysis, design, implementation and resource management. (*Prerequisite:* 507)

**ADMN 525 (1½) LABOUR RELATIONS AND COLLECTIVE BARGAINING**

This course examines the origins, legal frameworks, participants and practice of labour relations and collective bargaining in Canada's highly unionized public sector. Current developments are carefully monitored and I.R. practitioners exchange views with students regarding future significant trends in public sector labour relations.

**ADMN 526 (1½) INFORMATION TECHNOLOGY & MANAGEMENT**

The purpose of the course is to provide students with a variety of exposures to office automation, and with the analytical skills necessary for the selection, design, implementation and evaluation of new office systems. The course will emphasize hands on experience with software related to management, including word processing, spreadsheet, database management and graphics programs. An introduction to programming in BASIC will be provided. (*Prerequisite:* 500)

**ADMN 527 (1½) DECISION AND RISK ANALYSIS**

Application of decision analysis within the public sector will be considered with particular regard to the use of elementary Bayesian and cardinal utility theory. Among topics to be included are: the representation of uncertainty in terms of probability, the use of data to reduce uncertainty, the characteristics of risk aversion, the value of information, and the use of sequential decisions in data gathering and analysis.

**ADMN 528 (1½) PROJECT MANAGEMENT**

The coordination of manpower and equipment to address problems of unexpected delays, running over budget, and meeting standards. Case studies with supporting theory are analyzed through class discussion and with the micro-computer.

**ADMN 529 (1½) ORGANIZATIONAL DEVELOPMENT**

An application of the action research approach to organizational development; workshops on conflict resolution, team building, sociotechnical design, survey feedback, process consultation. Attention will be paid to organizational diagnosis, organizational change and overcoming resistance to change. (*Prerequisite:* 507)



**ADMN 530 (1½) ORGANIZATIONAL THEORY AND JOB DESIGN**

The course will deal with organization and management theory, general systems theory; approaches to improving the quality of working life, job enrichment, job enhancement, industrial democracy, quality circles, alternative schedule arrangements. (*Prerequisite:* 507)

**ADMN 531 (1½) HUMAN RESOURCE MANAGEMENT**

This course provides a general survey of the activities that comprise the management of human resources including human resource planning, employment equity, recruitment, selection, training, performance evaluation, and compensation. (*Prerequisite:* 507)

**ADMN 532 (1½) THE MANAGEMENT OF CHANGE**

This course focuses on managing change in organizations, including strategies and principles of change and problems of power and conflict.

**ADMN 533 (1½) PUBLIC SECTOR MARKETING AND POLICY IMPLEMENTATION**

This course applies the main elements of the marketing process to public sector issues. Topics include: relationships amongst various publics; similarities and differences between public and private sector marketing; market research and segmentation; marketing mix and implementation.

**ADMN 535 (1½) REGULATION AND COMPETITION POLICY**

This course investigates Canada's use of competitive and regulatory instruments to govern the operation of important sectors of the economy. Emphasis will be on the economic policy aspects of competition and regulation, but sufficient understanding of the legal and institutional underpinnings will be developed. Case studies will come from the following areas: transportation, telecommunications, energy, forestry, fisheries, agriculture, occupational and product safety, and environmental pollution. (*Prerequisite:* 503, 504, 510)

**ADMN 537 (1½) PROGRAM EVALUATION**

This course focuses on the design and conduct of program evaluations. Emphasis is placed on the acquisition of skills necessary to model public sector programs, design appropriate evaluations of them, measure key variables, and collect and analyze information. Students are exposed to a range of actual evaluations and are expected to design a program evaluation by the end of the course. Experience with mainframe computers is required. (*Prerequisites:* 502A and 502B or their equivalents)

**ADMN 539 (1½) MANAGING FOR EXCELLENCE IN THE PUBLIC SECTOR**

This seminar analyses those attributes which lead to high performance and high morale in public and private sector organizations, and examines how public sector organizations transform themselves towards the "well-performing" paradigm. The content includes: current management theory; Japanese management techniques; the characteristics and performance of "excellent" private sector companies and "well-performing" public organizations; a comparison of private and public sector organizational environments and the application of Japanese and "excellence" techniques to public sector management.

**ADMN 541 (1½) BUDGETING, CONTROL AND AUDITING IN THE PUBLIC SECTOR AND THE PRIVATE NON-PROFIT SECTOR**

A detailed treatment of the various concepts and theories of public sector and private non-profit sector budgeting, control and auditing, with particular emphasis on the various levels of accountability and the range of analytical support procedures required to sustain these levels. Case studies in the Government of Canada, and in selected provincial and municipal governments and private non-profit organizations. (*Prerequisite:* 512)

**ADMN 542 (1½) MANAGEMENT ACCOUNTING IN THE PUBLIC SECTOR AND THE PRIVATE NON-PROFIT SECTOR**

Alternative concepts and theories of cost as they apply in the public sector and in the private non-profit sector and critical evaluation of costing methods and policies in public sector, private non-profit sector organizations. (*Prerequisite:* 512)

**ADMN 543 (1½) DEVELOPMENTAL ADMINISTRATION**

A civil servant in a Third World country functions in an environment that is different from the situation in Canada or other high income countries. The purpose of this course is to understand public administrations in developing countries: the issues confronted, the policy processes employed and the decisions reached. Examples will be drawn from the Asia-Pacific region and elsewhere.

**ADMIN 544 (1½) COST BENEFIT ANALYSIS**

A survey of the techniques of cost benefit analysis, with emphasis on the practical problems that arise in an applied context. (*Prerequisites:* 500, 502B and 503)

**ADMN 545 (1½) LOCAL GOVERNMENT ORGANIZATION, OPERATION AND FINANCE**

Examination of all forms of local government in relation to functions performed, decision processes, finance and relations among local governments and between local governments and the provincial and federal government. Emphasis will be placed on the relationship between structure and performance in different environments, including urban, rural and environmentally sensitive coastal areas in British Columbia.

**ADMN 546 (1½) ISSUES IN MANAGEMENT OF LOCAL GOVERNMENT**

The examination of topics in local government management: labour-management relations, growth management, cutback management, technologies of local government service delivery, budgeting processes, land use management and planning. Some emphasis may be placed on quantitative analyses of local government related research data.

**ADMN 547 (1½) PROGRAM IMPLEMENTATION**

Fundamental issues and principles of public service provision are analyzed using a conceptual framework for the implementation process. Main features of the political and bureaucratic settings are examined. Economic, administrative, legal, political and social dimensions of authoritatively carrying out policy directives and providing public services are considered to develop and strengthen skills in systematically assessing the implementation process.

**ADMN 549 (1½) PROCESSES AND PROBLEMS IN THE FORMATION OF ECONOMIC POLICY**

Macroeconomic reasoning as applied to public issues, policies, and programs; the formation of monetary and fiscal policy; incomes policies; assessment of the overall economic effects of government regulation or intervention in industrial activities; federal-provincial conflicts and interagency differences in the development of economic policy. (*Prerequisite:* Consent of the instructor)

**ADMN 551 (1½) ADMINISTRATIVE LAW**

An examination of the basic principles of administrative law, emphasizing the functioning of administrative tribunals and judicial control of administrative action. (*Prerequisite:* 510)

**ADMN 552 (1½) FEDERALISM AND FEDERAL-PROVINCIAL RELATIONS IN CANADA**

This seminar provides a survey of the interacting elements and processes involved in the structure and functioning of contemporary federalism in Canada from a public administration perspective. Included is the theory of federalism as applied to Canada and an examination of the constitutional, political, social and economic forces which shape federal-provincial relations.

**ADMN 556 (1½) THE MACHINERY OF GOVERNMENT**

An examination of the structures, systems and processes of modern bureaucratic government at the federal and provincial levels. Topics may include the organization and management of priority setting, policy making, resource allocation, service delivery, regulation and public ownership. (*Prerequisite:* 504, 507)

**ADMN 563 (1½) ASPECTS OF RESEARCH DESIGN**

Problem solving in administrative contexts: the development process by which an administrative concern may be formed into a research project which is feasible, and whose findings may have administrative utility.



**ADMN 564 (1½) SEMINAR ON SOCIAL POLICY ISSUES**

An examination of objectives of social policy, methods of analysis, and links between analytical and administrative concerns. Topics and cases will be selected from the literature in areas such as health, education, welfare and social security, immigration, language rights, and consumer affairs.

**ADMN 575 (1½) COASTAL RESOURCE USE, LAW AND MANAGEMENT**

Examination of coastal resources and the decision processes through which uses are determined in British Columbia. Specific treatment of the characteristics of resources, rationing and enhancement processes, the legal framework, and the role of governments and political decision making within an integrated framework, drawing on concepts from economics, political science, geography and law. (Credit cannot be given for both 575 and Geography 555.)

**ADMN 577 (1½) STRATEGIC PLANNING SEMINAR**

This seminar will include an examination of the strategic planning process including the definition of organizational missions and objectives; the uses of environmental scanning; scenario building and fore-

casting; the development of strategy and the dynamics of implementation. Special emphasis is placed on the use of strategic planning as a practical management technique and the challenges and limitations of strategic planning processes in the public sector.

**ADMN 578 (1½) ADVANCED METHODS OF ANALYSIS**

This course builds upon basic research methods and quantitative skills acquired in 500, 502A and 502B or their equivalents. The course focuses on selected topics in statistical analysis, survey research methods and quasi experimental research design. Familiarity with SPSSx is required for students taking the course. (Prerequisites: 500, 502A, 502B)

**ADMN 590 (1½ or 3) DIRECTED STUDIES**

(May be taken more than once in different subject areas, with the permission of the Director)

**ADMN 598 (3) REPORT REQUIREMENT**

A substantial analysis of a significant management problem or policy issue, prepared individually in consultation with a School faculty adviser. (Prerequisites: 500 to 516) (Grading: INP, COM, N or F)

## SOCIOLOGY

The program leading to the Master of Arts degree in sociology, while containing a core of theory, research methods, quantitative techniques and participation in the departmental seminar, is designed to provide flexibility for students as well as to reflect the diversity which characterizes the discipline. Individual programs beyond the core are designed to fit students' interests and to supplement areas in which they may require additional work, insofar as faculty resources and specializations permit.

Normally, work as a research assistant or teaching assistant is an integral part of the Master's program in Sociology.

Students are urged to consult the most recent edition of "A Guide to Graduate Studies in Sociology," which may be obtained at the Departmental Office. The Guide provides further details of the program and specifies additional requirements for program completion.

**Cooperative Education:**

The Cooperative Education option within the M.A. program provides for some Sociology students to obtain relevant work experience while completing their degree requirements. Students who successfully complete (what will normally be) two work terms and satisfy the academic requirements of the M.A. program offered by the Department of Sociology will receive a notation to this effect on their transcripts at graduation. Prior work experience is not accepted for work term credit.

Applications for admission to the Cooperative Program should be submitted not later than the second week of the student's first term in the M.A. program. Normally work term placements will not be considered for those students who have not successfully completed Sociology 500, 505, 510 and 511 by the time that their work term placement is expected to begin. The Cooperative Education option is only available to full-time students; part-time students may apply for admission on the understanding that they will be required to change to full-time status for the remainder of their program.

**1. Program of Studies****Undergraduate Competence:**

Preference will be given to students with a B+ (6.00) average or better. All incoming graduate students must fulfill the requirements expected of undergraduate Honours students in this Department (i.e., SOCI 302, 371, 375, 375A, 375B, 402 and 471, or their equivalencies).

**Graduate Course Work and Thesis:**

All students are required to complete a minimum of 15 units of prescribed Calendar listings, of which at least 12 units must be drawn from Sociology listings in the Calendar and of which at least 12 units must be at the graduate level. All students must write a thesis and may receive a maximum of 3 units credit for the thesis. Students are required to demonstrate competence in sociological theory (SOCI 500), the methodology of sociological research design (511) and data analysis, as well as quantitative/statistical techniques (510). Ordinarily such com-

petence shall be demonstrated by successful course completion; however, the abilities and prior performances of entering students shall be considered in the planning of their programs — both in terms of particular courses and the unit values required. In addition, students are required to enroll in a Departmental seminar (505) as part of their degree program.

Other listings are designed to facilitate the range of interests displayed by traditional and contemporary sociological inquiry (530, 535, 540, 550, 560, 585, and 590). These may capitalize on the department's cross-appointed faculty in the Centre on Aging; the University's computer facilities; the Library's Human Relations Area Files holdings; and the British Columbia Provincial Archives. The range of such interests is illustrated by the current area of interests declared by the sociology faculty (see below).

**2. Length of Program**

The department expects full time students to spend two years completing the Master's degree, although it is possible for outstanding students to complete the degree in twelve months.

**Concentration in Contemporary Social & Political Thought (CSPT):**

This program is open to selected students in Sociology and Political Science. Students must meet the core graduating requirements of the individual departments.

The Graduate Adviser in each department should be consulted for details. To complete the CSPT program in Sociology a student must complete the 15 units of requirements for an M.A. in Sociology (including a thesis for SOCI 599 in the field of CSPT), plus at least 3 units of CSPT 500. The calendar entry under the Department of Political Science should also be consulted for descriptions of CSPT 500 and 590.

Admission to the program in CSPT is subject to the written approval of the Program Director. Applicants must already have been accepted for the M.A. program in Sociology.

The requirements for the program in the department of Political Science differ from those in Sociology.

**Faculty and Current Areas of Interest**

|  |   |
|--|---|
| P. Morgan Baker, Ph.D.<br>(Minnesota)  | Social psychology; group dynamics, social gerontology                               |
| Cecilia M. Benoit, Ph.D.<br>(Toronto)  | Occupations and professions; medical and health care systems; family and work roles |
| William K. Carroll, Ph.D.<br>(York)    | Political economy; social movements; class, gender and ideology                     |
| Neena L. Chappell, Ph.D.<br>(McMaster) | Aging, health & social policy & research methods                                    |
| Holly Devor, Ph.D.<br>(Washington)     | Sex, gender and sexuality; feminist theory  |



|  |   |
|--|---|
| C. David Gartrell, Ph.D.<br>(Harvard)  | Theory; networks; social psychology; statistics   |
| Dieter K. Haselbach, Ph.D.<br>(Philippa-Universität)<br>(Visiting Associate Professor) | Theory, culture, political sociology  |
| R. Alan Hedley, Ph.D.<br>(Oregon)  | Work and technology; corporations and society; economic sociology; social change; cross-national research |
| Daniel J. Koenig, Ph.D.<br>(Illinois)  | Criminology/deviance; media; applied sociology  |
| Bill McCarthy, Ph.D.<br>(Toronto)  | Crime & deviance; youth; research methods   |
| Martha McMahon, Ph.D.<br>(McMaster)  | Symbolic interaction; feminist theory; women and the environment  |
| Richard L. Ogmundson, Ph.D.<br>(Michigan)  | Stratification; political; elites   |
| Margaret J. Penning, Ph.D.<br>(Alberta)  | Aging; health and health care; research methods   |
| Dorothy E. Smith, Ph.D.<br>(Berkeley)<br>(Adjunct Professor)                           | Social organization of knowledge; political economy of gender   |
| Jean E. Veivers, Ph.D.<br>(Toronto)  | Family; demography; sex roles   |
| T. Rennie Warburton, Ph.D.<br>(London School of Economics)                             | Religion; class relations and ideology; racism and ethnicity  |
| Zheng Wu, Ph.D.<br>(Western Ontario)   | Demography; family  |

## GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

### **SOCI 500 (1½) PROBLEMS IN SOCIOLOGICAL THEORY** S

### **SOCI 505 (1½) CURRENT PROBLEMS AND RESEARCH IN SOCIOLOGY**

Proseminar. Seminar discussion of developments in sociological theory, empirical research, methodology, and other issues in contemporary sociology led by a faculty co-ordinator. Members of the Department will present recent developments that they consider to be noteworthy in different areas of sociology. F

### **SOCI 510 (1½) QUANTITATIVE METHODS**

This course aims to provide students with a clear understanding of ordinary least squares techniques. It also extends this knowledge to incorporate models which are commonly subsumed in the framework of the general linear model. It includes such topics as collinearity,

outliers and influential data, non-linearity, heteroscedasticity, generalized least squares, log-linear and logistic models. (Prerequisite: Sociology 471 or its equivalent.) S

### **SOCI 511 (1½) RESEARCH DESIGN** F

### **SOCI 530 (1½ or 3) STUDIES IN SOCIAL STRUCTURE** (May be repeated once for a total of 3 units) NO

### **SOCI 535 (1½ or 3) STUDIES IN SOCIAL PROCESSES** (May be repeated once for a total of 3 units) NO

### **SOCI 540 (1½) STUDIES IN THE LIFE COURSE**

Recent developments and issues in aspects of the life course such as aging and social gerontology, the changing nature of the family, sociology of health and illness, and the study of demographic transitions nationally and internationally. Not offered every year. Topics may vary from year to year. (May be taken more than once with different topics) F

### **SOCI 550 (1½) SOCIAL INEQUALITY AND SOCIAL CHANGE**

Topics may include the study of elites and the changing nature of elites in Canada; social movement and counterhegemonic politics; the nature of class, gender, racial, ethnic and social differentiation, stratification and conflict; the comparative analysis of development, industrialization and technology; and the political economy of Canadian and global capitalism. Not offered every year. Topics may vary from year to year. (May be taken more than once with different topics) NO

### **SOCI 560 (1½) THE INDIVIDUAL IN A SOCIAL WORLD**

The study of individual experiences in the context of social structure. May include the study of experiences at work and in organizations; the study of social networks; identity formation and transformation, sexuality and gender relations; deviance and criminality. Not offered every year. Topics may vary from year to year. (May be taken more than once with different topics) F

### **SOCI 585 (1½) SEMINAR ON AGING**

This course aims to provide students with an advanced understanding of social gerontology, including theories and substantive topics within the area. Social stratification theory and a political economy perspective are examples of the former. Caregiving, inter-generational relations, and health care policies are examples of the latter. Not offered every year. Specific topics will vary from year to year and to a certain extent will accommodate student interest. (Prerequisite: Sociology 385 or the equivalent) NO

### **SOCI 590 (1½ or 3) DIRECTED STUDIES: AGING, HEALTH, AND HEALTH CARE**

(May be repeated once for a total of 3 units) K

### **SOCI 599 (3) THESIS**

(Prerequisite: The student's supervisory committee must have approved and placed on file an acceptable written thesis proposal prior to registration) (Grading: INP, COM, N or F)

## THEATRE

### 1. Programs in Graduate Studies

The Department offers five programs in graduate studies:

- M.A. in Theatre History
- M.A. in Theatre/Drama in Education
- M.F.A. in Directing
- M.F.A. in Design/Production

Well qualified applicants may be admitted to a program leading to a Ph.D. in Theatre History.

### 2. Applicants for admission to any of the above programs must send a letter to the Theatre Department Graduate Adviser with a statement of purpose, a detailed resume of their educational background, theatre experience, and teaching experience if applicable.

### 3. Participation in Production

M.A. students are encouraged to work in departmental productions.

### 4. Faculty Supervisors

Each student will be assigned a faculty supervisor who will assist the student in the development of the thesis or practicum.

### 5. If applicants wish to be considered for a University of Victoria Fellowship, their applications must be complete by 31 December of the year prior to entry into the graduate program.

## MASTER OF ARTS

All candidates are required to complete a minimum of 12 units of graduate course work (as described in the separate entries below) and a thesis of 6 units. The residence requirement is one year.



**M.A. in Theatre History: Requirements**

- (a) A knowledge at the B.F.A. level of Theatre History. A knowledge of Design and Directing is also highly desirable.
- (b) 6 units — graduate Theatre History (other than Theatre 516, and including Theatre 500)
- (c) 3 units — to be chosen from the graduate areas of Theatre/Drama in Education, Design or Directing
- (d) 3 units — to be chosen from a related discipline, to be approved by the Graduate Adviser (may be taken at the 300/400 level)
- (e) 6 units — Theatre 599, M.A. Thesis. The candidate will submit the thesis and orally defend it as part of the requirements of the Faculty of Graduate Studies.

Normally, all admissions are conditional upon a diagnostic examination in theatre history.

NOTE: If the application is granted, the complete year of courses and residence will be applied to the requirements for the Ph.D.

**M.A. in Theatre/Drama in Education: Requirements**

- (a) A knowledge at the B.F.A. level of Theatre History, Design and Directing is highly desirable.
- (b) Practical teaching experience.
- (c) 6 units — Theatre 506 and 507.
- (d) 3 units — To be chosen from the graduate areas of Theatre History (including Theatre 500), Design or Directing.
- (e) 3 units — To be chosen from a related discipline, to be approved by the Graduate Adviser (may be taken at the 300/400 level)
- (f) 6 units — Theatre 599, M.A. Thesis. The candidate will submit the thesis and orally defend it as part of the requirements of the Faculty of Graduate Studies.

**MASTER OF FINE ARTS**

The programs normally require a minimum of two years in residence. Applicants must have practical theatre experience and may be required to take a diagnostic examination. Any deficiencies will represent additional requirements for the student and must be eliminated before the student may enroll in the graduate level courses in that area. All courses must be taken at the Graduate level unless otherwise specified. All admissions are conditional on the diagnostic examination.

Candidates are required to write comprehensive examinations before proceeding to the practicum. Details are provided in the Department Handbook.

**M.F.A. in Directing/Production: Requirements**

- (a) A knowledge at the B.F.A. level of Lighting, Costume and Scene Design, Theatre History and Directing. The student's knowledge will be assessed by the diagnostic examination (see above).
- (b) 6 units — Directing and Advanced Directing (other than 515).
- (c) 3 units — either Lighting, Costume or Scene Design (other than 514).
- (d) 3 units — Theatre History (including Theatre 500).
- (e) If a written comprehensive examination is required, it must be passed no later than the spring term of the second year and prior to commencing work on the practicum production. The comprehensive examination will emphasize the practical areas of the theatre but may include Theatre History.
- (f) 6 units — Theatre 598, M.F.A. Practicum
  - (i) A full length production to be decided upon in consultation with the student's supervisor and the Department's graduate faculty.
  - (ii) An oral defense of the practicum production is part of the requirements of the Faculty of Graduate Studies.

**M.F.A. in Design/Production: Requirements**

- (a) A knowledge at the undergraduate level of Lighting, Costume and Scene Design, and a general understanding of Theatre History, Directing and Art History. The student's knowledge will be assessed by the diagnostic examination (see above).
- (b) 12 units — Four courses in theatre design/production other than Theatre 514.
- (c) 3 units — To be chosen from Theatre (including Theatre 500) or a related discipline, to be approved by the Supervisor (may be taken at the 300/400 level).
- (d) M.F.A. Design candidates will be given the opportunity to design mainstage productions.

- (e) A written comprehensive examination may be required. If required, it must be written no later than the spring term of the second year and prior to commencing work on the practicum production.
- (f) 6 units — Theatre 598, M.F.A. Practicum
  - (i) The nature of the practicum will be determined in consultation with the student's supervisor and the Department's graduate faculty.
  - (ii) An oral defense of the practicum production is part of the requirements of the Faculty of Graduate Studies. Normally this defense must occur within two months of the close of the production.

**DOCTOR OF PHILOSOPHY****REGULATIONS****1. Admission**

To be eligible for admission to the PhD in Theatre History a student must:

- a) hold an MA in Theatre History or a closely related field from a recognized university, or else be admissible by special advancement from a BA to a PhD, provided that he or she is already enrolled in the Department as an MA student in Theatre History and fulfills the criteria for such advancement as outlined in the Graduate Calendar;
- b) demonstrate a capability for advanced research through the evidence of publication or MA thesis, and letters of reference;
- c) satisfy the admission requirement of the Faculty of Graduate Studies.

Applicants whose native language is not English and who have not resided in an English-speaking country for the five years immediately preceding their application must submit evidence of having taken the test of English as a foreign language (TOEFL) with a minimum score of 575.

All PhD students are admitted as provisional students until their thesis proposals have been approved by their supervisory committees (otherwise known as the Candidacy Examination). At that time they are automatically reclassified as candidates for the degree of Doctor of Philosophy.

**2. Supervision**

Each student admitted as a provisional candidate is assigned a supervisor appropriate to his or her research area and placed under the direction of a supervisory committee. This is done within the first term of the student's residence. The committee, chaired by the supervisor, will consist of at least four members, one of whom must be from outside the Department of Theatre.

**3. Curricular Requirements****a) Course Work**

A minimum of 6.0 units of graduate seminars, including THEA 500 (Methods and Materials of Theatre Research). If the department or the supervisory committee decides that a student does not have sufficient background in a key area of Theatre History, further course work may be required. Students must also take 6.0 units of Directed Studies (THEA 690). All course work must be completed within two years of initial registration.

**b) Language Requirements**

These will be determined by the supervisory committee with specific reference to the student's thesis area. (The intention of the program is only to admit students whose areas of research will be in British or North American theatre.)

**c) Comprehensive Examination (THEA 695)**

This examines the student's knowledge of his or her general and special field, and will normally consist of two written examinations, with questions drawn up by the supervisory committee, which also evaluates the answers. The comprehensive examination must be completed within two years of initial registration, and is a prerequisite for the Candidacy Examination.

**d) Thesis Proposal (Candidacy Examination: THEA 697)**

This examines the proposed thesis topic in detail. Each student must submit a written proposal to the supervisory committee, which then meets to hear the student's oral presentation of the proposal. The Thesis Proposal must be approved by the supervisory committee within the third year of the student's program as dated from initial registration.



## e) Thesis (THEA 699)

All candidates are required to defend their dissertations in accordance with regulations established by the Faculty of Graduate Studies. No student may do this until all other requirements for the degree have been satisfied. After a successful defence, the supervisory committee will recommend to the Dean of Graduate Studies that the candidate be admitted to the degree of Doctor of Philosophy.

## SUMMARY OF COURSE REQUIREMENTS

Methods and Materials of Theatre Research (THEA 500: 3.0 units)

Other Graduate Seminars (3.0 units)

Directed Studies (THEA 690: 6.0 units)

Comprehensive Examination (THEA 695: 0.0 units)

Thesis Proposal/Candidacy Examination (THEA 697: 0.0 units)

Thesis (THEA 699: 30.0 units)

Total: 42.0 units

## PROGRESS REPORTS

In accordance with the regulations of the Faculty of Graduate Studies, all students in the PhD program must meet with their supervisory committees once a year in order that the committees may evaluate their progress. A written progress report will then be prepared by the supervisor for submission to the Dean. If progress is deemed to be unsatisfactory, the supervisory committee will recommend remedial action or ask the student to withdraw from the program.

### Faculty and Major Fields of Interest

|  |   |
|--|---|
| Michael R. Booth, Ph.D.<br>(London)            | 19th and 20th century British theatre, modern and experimental theatre, directing                                     |
| Linda Hardy, M.A.<br>(Toronto)                 | Acting, voice and speech for the stage, 19th century British theatre, directing                                       |
| Giles W. Hogya, Ph.D.<br>(Northwestern)        | Lighting and set design, directing, children's theatre  |
| Alan Hughes, Ph.D.<br>(Birmingham)             | 18th and 19th century British theatre, Shakespeare in performance, Greek theatre                                      |
| John Krich, M.F.A.<br>(Yale)                   | Acting, directing, popular entertainment (circus, carnival, hippo-drama)  |
| Harvey M. Miller, Ph.D.<br>(Pittsburgh)        | Directing, acting, Elizabethan theatre production, 20th century American theatre                                      |
| Juliana M. Saxton, B.A.<br>(Toronto)           | Drama in education, theatre in education, production, promotion, administration and tour management                   |
| Allan Stichbury, B.F.A.<br>(Alberta)           | Stage design (scenic, costumes and lighting), Canadian theatre.   |
| Sheila M. Stowell, Ph.D.<br>(British Columbia) | Women in theatre; Victorian and Edwardian theatre and drama; feminist theatre history; 20th century political theatre |

## GRADUATE COURSES

NOTE: The content of courses numbered 500-590 may vary in different academic sessions. These courses may then be taken for credit more than once at the discretion of the Department. Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

### THEA 500 (1½ or 3) METHODS AND MATERIALS OF THEATRE RESEARCH

### THEA 501 (1½ or 3) SEMINAR IN HISTORY AND CRITICISM OF TRAGEDY

### THEA 502 (1½ or 3) SEMINAR IN HISTORY AND CRITICISM OF COMEDY

### THEA 503 (1½ or 3) SEMINAR IN EUROPEAN THEATRE HISTORY

### THEA 504 (1½ or 3) SEMINAR IN NORTH AMERICAN THEATRE HISTORY

### THEA 505 (1½ or 3) SEMINAR IN THEATRICAL STYLES

### THEA 506 (1½ or 3) SEMINAR IN DRAMA IN EDUCATION

### THEA 507 (1½ or 3) SEMINAR IN THEATRE IN EDUCATION

### THEA 508 (1½ or 3) SCENE DESIGN

### THEA 509 (1½ or 3) LIGHTING DESIGN

### THEA 510 (1½ or 3) COSTUME DESIGN

### THEA 511 (1½ or 3) PRODUCTION

### THEA 512 (1½ or 3) DIRECTING

### THEA 513 (1½ or 3) SEMINAR IN THEATRE AESTHETICS

### THEA 514 (1½ or 3) SEMINAR IN DESIGN

### THEA 515 (1½ or 3) SEMINAR IN DIRECTING

### THEA 516 (1½ or 3) SEMINAR IN THEATRE HISTORY

### THEA 520 (1½ or 3) ADVANCED PROBLEMS IN SCENE DESIGN

### THEA 521 (1½ or 3) ADVANCED PROBLEMS IN LIGHTING DESIGN

### THEA 522 (1½ or 3) ADVANCED PROBLEMS IN COSTUME DESIGN

### THEA 523 (1½ or 3) ADVANCED PROBLEMS IN DIRECTING

### THEA 590 (1½ or 3) DIRECTED STUDIES

### THEA 598 M.F.A. PRACTICUM (Grading: INP, COM, N or F)

### THEA 599 M.A. THESIS (Grading: INP, COM, N or F)

### THEA 690 (1½-6) DIRECTED STUDIES

(Prerequisite: Permission of the Department) (May be taken for credit more than once at the discretion of the Department)

### THEA 695 (0) COMPREHENSIVE EXAMINATION (Grading: INP, COM, N or F)

### THEA 697 (0) DISSERTATION PROPOSAL/CANDIDACY EXAM (Grading: INP, COM, N or F)

### THEA 699 (30) DISSERTATION

(Prerequisite: Permission of the Department) (Grading: INP, COM, N or F)



## VISUAL ARTS

The Department of Visual Arts offers a program leading to the degree of M.F.A. The normal length of time for the completion of the M.F.A. is two years of full time study, although a student may be advised, or permitted upon Departmental recommendation, to delay the final exhibition for a period of not more than twelve months.

Applicants to the M.F.A. program must submit a folio of work, preferably in the form of slides. Additionally, a Statement of Intent describing the applicant's conceptual approach to art making is required. Applicants should also state why they are applying to the University of Victoria M.F.A. program. As M.F.A. positions are limited, applications will be reviewed in a competitive context. Students who have not previously completed the equivalent of twelve units of art history, six of which must be at the 300 or 400 level, will be required to take the necessary additional courses at the University of Victoria before the granting of the M.F.A. NOTE: Applicants wishing to be considered for fellowships must have completed applications in the Graduate Admissions and Records Office by February 15. All other applications must be completed by the end of February.

Students with a B.F.A. from the University of Victoria will be encouraged to seek their master's degree elsewhere.

The program is centred around the major areas Drawing, Painting, Sculpture, Printmaking and Photography. In the tradition of contemporary practice members of the department also recognize and encourage work that does not fit singularly into the above categories.

At the end of the first year students will present an exhibition of their own work which will be evaluated by faculty members in the Department, in order to determine the advisability of a student continuing to the second year. Art 501, 512, 522, 532 and 542 will culminate in a solo exhibition, normally at the end of the second year of study. This final exhibition (598) will be the major source of evaluation for the student's attainment of the M.F.A., and will therefore form the basis of the final oral examination. Notwithstanding the art history requirement, a student must complete the following courses:

one two year sequence; 500 and 501, 511 and 512, or 521 and 522, or 531 and 532 or 541 and 542; in addition to 580, 581 and 598.

Students will be expected to meet on a regular basis with their faculty supervisor(s) for constructive critiques and seminars dealing with their work.

Normally, work as a research assistant or teaching assistant is available to students in the graduate program.

### Faculty and Areas of Interest

|   |                    |
|---|--------------------|
| Vikky Alexander, B.F.A.<br>(Nova Scotia College of Art & Design)      | Photography        |
| Mowry Baden, M.A.<br>(Stanford)                                       | Sculpture          |
| Roland Brener, Post Dip. A.D.<br>(St. Martin's School of Art, London) | Sculpture          |
| Fred Douglas  | Photography        |
| Lynda Gammon, M.F.A.<br>(York)  | Drawing, sculpture |

|   |                   |
|---|-------------------|
| Sandra Meigs, B.F.A.<br>(Nova Scotia College of Arts and Design),<br>M.A. (Dalhousie) | Painting, drawing |
| George W. Tiessen, M.F.A.<br>(Cornell)  | Printmaking       |
| Robert Youds, M.F.A.<br>(York)  | Painting          |

## GRADUATE COURSES

Not all the following courses will be offered in a particular year. Students should consult the Department to determine the courses which will be offered this year.

### ART 500 (9) FIRST YEAR DRAWING

### ART 501 (9) SECOND YEAR DRAWING

### ART 511 (9) FIRST YEAR PAINTING

### ART 512 (9) SECOND YEAR PAINTING

### ART 521 (9) FIRST YEAR SCULPTURE

### ART 522 (9) SECOND YEAR SCULPTURE

### ART 531 (9) FIRST YEAR PRINTMAKING

### ART 532 (9) SECOND YEAR PRINTMAKING

### ART 541 (9) FIRST YEAR PHOTOGRAPHY

### ART 542 (9) SECOND YEAR PHOTOGRAPHY

All studio courses are based on the individual student's work with ongoing input provided by a supervisor, peers and a faculty committee.

### ART 580 (6) FIRST YEAR SEMINAR

### ART 581 (6) SECOND YEAR SEMINAR

The graduate seminar meets weekly. Students are expected to make presentations based on their work and to discuss its significant qualities. The seminar also serves as a forum for visiting artists and critics and presentations by members of faculty. Students are expected to participate actively in discussion and to demonstrate their critical and analytical abilities in dealing with the material presented.

### ART 598 (3) M.F.A. DEGREE EXHIBITION

This final exhibition will be the major source of evaluation for the student's attainment of the M.F.A. and should be regarded as the equivalent of the scholarly thesis of an academic discipline. The degree exhibition will be evaluated by the student's committee which will submit its decision to the Department for approval. Graduating students must be available to speak to their work and answer questions from the examining committee. The committee may ask questions about the cultural, social and theoretical relations apparent in the student's work. Students are required to provide documentation of their graduating exhibition which will be on file in the department. This documentation will take the form of slides, photographs, videotapes or other forms appropriate to the student's production.



# AWARDS FOR GRADUATE STUDY

## UNIVERSITY OF VICTORIA FELLOWSHIPS

University of Victoria Fellowships of \$11,400 (Master's) and \$12,400 (Ph.D.) may be awarded by the Faculty of Graduate Studies to students of high academic standing registered full time in the Faculty as candidates or provisional candidates for a degree.

All new applicants are evaluated for University Fellowships. The minimum standard required for consideration is an "A-". Grade calculations and equivalencies are determined by the Graduate Admissions and Records Office. Applications for admission must be complete by February 15 in order to be considered. Normally, awards are available for those entering in September only.

The competition for University of Victoria Fellowships is very difficult. Meeting the minimum standard for consideration does not guarantee that you will be successful in the competition.

## SCHOLARSHIPS, AWARDS, BURSARIES AND PRIZES

The Faculty of Graduate Studies administers a number of awards to students in graduate programs at the University of Victoria. Detailed information on these awards and application procedures is included in the publication entitled *Awards for Graduate Study, The University of Victoria*, which is available from the Office of the Dean of Graduate Studies, University Centre, Room A209.

## ASSISTANTSHIPS

Graduate students may make application, through the Department concerned, for paid employment as Academic Assistant, Research Assistant, Scientific Assistant, Laboratory Instructor. Such employment is negotiated through the Department concerned, not through the Faculty of Graduate Studies, at rates of pay determined by the University. Students appointed as Teaching and/or Research Assistants may also be recommended by their departments to the Faculty of Graduate Studies for a Supplement.



# FINANCIAL AID

## GENERAL REGULATIONS

All inquiries concerning material in this section should be directed to the Student Financial Aid Services Office, University of Victoria, Box 3025, Victoria, B.C. V8W 3P2.

All bursaries adjudicated by the University of Victoria are administered by the Senate Committee on Awards. Grants, loans and Work Study positions are administered by the Student Financial Aid Services staff.

To be eligible for a bursary offered by the University, students must take an appropriate number of units in the Winter Session, normally 15. If, however, students can demonstrate that they are carrying the maximum course load possible in the circumstances, exceptions can be made to this stipulation. All students who are taking fewer than 15 units during the Winter Session and who wish to be considered for a bursary must have an interview with an adviser from the Student Financial Aid Services Office.

Where applications are necessary, the deadline for submission of application forms is specified for each bursary.

Except where the donor directs otherwise, the proceeds of bursaries issued by or through the University will be applied towards the total fees for the academic year. If the amount of the bursary or bursaries exceeds the unpaid total fees for the academic year, the excess balance will be paid to the student. Proceeds from government loans, grants and Work Study are paid directly to the student.

Any awards may be withheld or cancelled for any of the following reasons: lack of suitable candidates; failure to meet terms and conditions of award; withdrawal from the University; withdrawal of the award by donor.

If for any reason the original recipient becomes ineligible, the allocated funds may be reassigned to other students.

Unless otherwise noted, all assistance available in this section is limited to Canadian citizens or permanent residents. This regulation is invoked by Employment and Immigration Canada.

## DEFINITIONS

- (a) An award based on financial need is any bursary, grant, loan or Work Study position.
- (b) A bursary is a nonrepayable monetary award based on financial need and reasonable academic standing, as determined by the Senate Committee on Awards.
- (c) A grant is a nonrepayable monetary award based on financial need as determined by the office or agency mentioned in the award.
- (d) A loan is a repayable monetary award based on financial need.
- (e) A Work Study position is a subsidized job on campus, allocated on the basis of financial need as demonstrated on a British Columbia Student Assistance Program form.

## SECTION 1

### THE UNIVERSITY OF VICTORIA TUITION ASSISTANCE BURSARY FUND

This fund was established by the Board of Governors in 1965, who at that time expressed concern that qualified students could not attend the University of Victoria because of serious financial difficulties. Specifically, the Board indicated:

- (a) that the Fund is intended to assist students who are in serious financial difficulty
- (b) that applicants be interviewed by an officer of the University;

- (c) that students should not normally expect to receive assistance unless they meet the need criteria established by the B.C. Student Loan Committee. Where there are special circumstances, appropriate consideration will be given, and each case will be judged on its own merits.

Application forms are only available by appointment after registration from the Student Financial Aid Services Office, Second Floor, University Centre. Completed application forms are to be submitted in person by November 15 in the First Term, and by February 15 in the Second Term.

## SECTION 2

### ENTRANCE BURSARIES REQUIRING APPLICATION

#### A. ENTRANCE BURSARIES ADMINISTERED BY THE UNIVERSITY OF VICTORIA

Application forms for the following bursaries may be obtained from the Student Financial Aid Services Office, University of Victoria, Box 3025, Victoria, B.C. V8W 3P2, and must be returned by June 30, unless otherwise indicated. Winners will be selected by the Senate Committee on Awards on the basis of financial need and recommendations from secondary schools.

**\* SARA AND JEAN MACDONALD BURSARY FUND** — This fund provides five bursaries valued at \$450 each for worthy and deserving women students entering the University of Victoria from secondary schools.

**THE GEORGE F. PENSOM BURSARY FUND** — This fund provides bursaries of varying amounts for worthy and deserving students entering the University of Victoria from secondary schools, with preference being given to students from School District #47.

**\* THE WILF SADLER MEMORIAL BURSARY FUND** — A bursary of \$500 will be allocated annually to a needy student from the Greater Victoria area who is entering the University from the secondary school system. Preference will be given to students who can demonstrate significant involvement in amateur sports.

#### B. ENTRANCE BURSARIES ADMINISTERED BY THE UNIVERSITY OF BRITISH COLUMBIA

Application forms for the following bursaries may be obtained from the Office of Awards and Financial Aid, the University of British Columbia, Brook Hall, Room 1036-1874 East Mall, Vancouver, B.C. V6T 1Z1. Since some changes may have been made after this calendar went to press, you are urged to refer to the Awards and Financial Aid Supplement to the U.B.C. Calendar.

**THE RETAIL, WHOLESALE UNION, LOCAL 580 BURSARY** — A bursary of \$500 and a second of \$250 is offered by the Retail, Wholesale and Department Store Union, Local 580 to active members, sons, daughters and legal wards of active members of the Union in good standing. It is open in competition to applicants who are proceeding from Grade 12 to studies at the University of British Columbia, the University of Victoria or Simon Fraser University or to a regional college in a full program leading to a degree in any field. To be eligible for consideration a candidate must have satisfactory standing (normally an overall average of 65% in Grade 12). In the selection of the winner, the basic factor will be the financial need of the candidates and their families. The winner will be selected in consultation with the Union.

\* Administered by the University of Victoria Foundation.



**RETAIL, WHOLESALE UNION, LOCAL 580** — Stan Colbert Bursary — A bursary of \$500 is offered by the Retail Wholesale Union Local 580 to active members, or sons, daughters and legal wards of active members of the Union in good standing. It is open in competition to applicants who are proceeding from Grade 12 to studies at the University of British Columbia, the University of Victoria, the B.C. Institute of Technology, or Simon Fraser University, or to a regional college in a full program leading to a degree or equivalent in any field. To be eligible for consideration a candidate must have satisfactory academic standing (normally an overall average of at least 65% in Grade 12). In the selection of the winner, the basic factor will be the financial need of the candidates and their families. The winner will be selected in consultation with the Union.

**WHITE SPOT LIMITED BURSARY** — Four \$500 bursaries are provided by White Spot Limited and its subsidiaries for their employees and sons and daughters of their employees who have served with the firm for at least one year by the application deadline. The bursaries are open to students beginning or continuing in a full program of studies at the University of B.C., the University of Victoria, Malaspina College, Simon Fraser University or the British Columbia Institute of Technology. Candidates must have achieved an average of at least 65% in their previous year of study. The awards are made in consultation with the company.

#### C. ENTRANCE AWARDS ADMINISTERED BY OTHER INSTITUTIONS AND ORGANIZATIONS

**THE EDWARD JAMES ASHMORE MEMORIAL BURSARY** — A bursary in the amount of \$1,000 is offered annually by the Hospital Employees' Union Local 180, in memory of the late Brother E.J. Ashmore who was 2nd Vice-President of the Union's Provincial Executive Committee. The bursary will be offered to students who are proceeding in the fall from Grade 12 to a full program of studies at the University of British Columbia, the University of Victoria, Simon Fraser University, or any regional college in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the British Columbia Institute of Technology. To be eligible an applicant must be the son/daughter of an active member of the Union ("active" being interpreted as on staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of the award but since superannuated). The information given in the application form must clearly establish the applicant's connection with Local 180. The bursary will be awarded to the candidate who, in the opinion of the University (in consultation with the Union) is best qualified in terms of financial need. Applications and information may be obtained from Hospital Employees' Union, Local 180, 2286 West 12th Avenue, Vancouver, B.C. V6K 2N5.

**THE BOBBY BAUER MEMORIAL AWARD** — The Bobby Bauer Memorial Foundation makes one or more awards annually to students demonstrating outstanding proficiency in hockey who qualify for admission to a full time undergraduate course at a Canadian university. Application should be made prior to August 31 on forms provided by the Foundation. A letter of reference from a person actively involved in hockey must accompany each application. Inquiries and each application should be sent directly to: Bobby Bauer Memorial Foundation, 60 Victoria Street North, Kitchener, Ontario, N2H 5B9.

**B.C. ASSOCIATION OF SOCIAL WORKERS, NORTHERN BRANCH, BURSARY** — This \$500 bursary is available for a student who is:

- 1) accepted for study in a recognized School of Social Work and enrolled in a program leading to a B.S.W. or M.S.W. degree,
- 2) a resident of the Northern Branch B.C.A.S.W. area (essentially regions 5, 7 and 8 of the Ministry of Human Resources),
- 3) has a need of financial assistance.

Application must be made by June 30 to Mr. Verne Dallamore, Chairperson, Bursary and Grants Committee, Northern Branch, B.C.A.S.W., P.O. Box 271, Prince George, B.C. V2L 4S2.

**CAL CALLAHAN MEMORIAL BURSARY** — The Pipe Line Contractors Association of Canada offers a bursary, or bursaries, to the total of \$5,000 per annum, to be awarded annually, to sons, daughters or legal wards of persons who derive their principal income from the Pipeline Industry and whose employers are members of the Association. The purpose of these bursaries is to give the financial assistance to students who are beginning first year studies in any field, at a recognized

University or College in Canada. Selection will be made by the Executive Committee of the Association from applicants, based upon scholastic record and financial need, provided that they otherwise qualify. Applications may be obtained from the Pipe Line Contractors Association of Canada, Suite 720, 5915 Airport Road, Mississauga, Ontario, L4V 1T1 and must be returned by not later than September 30th, accompanied by a receipt or other proof of enrollment.

**THE KIT DAVISON BURSARY ENDOWMENT FUND** — Administered by the Muscular Dystrophy Association of Canada, B.C. Region. This bursary has been established to honour Mrs. Davison. It is intended for students with muscular dystrophy who wish to continue their studies at any B.C. postsecondary institution. Criteria: Candidates must be registered with the Association, have completed Grade 12, and be a resident of B.C. Amount: \$500. Deadline for applications is August 1. Address: Suite 123, 1600 West 6th Avenue, Vancouver, B.C. V6J 1R3.

**THE HOSPITAL EMPLOYEES' UNION (PROVINCIAL EXECUTIVE) BURSARIES** — A bursary in the amount of \$500 is offered by the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade 12 to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. Present members of the Hospital Employees Union who have had one (1) year of continuous service shall, as well as their children and spouses, be eligible for Bursaries. Bursaries shall be attainable at any postsecondary education institute. Applications and information may be obtained from Hospital Employees' Union, Loc. 180, #800-1111 West Georgia St., Vancouver, B.C. V6E 3G7.

**THE HOSPITAL EMPLOYEES' UNION (ROYAL JUBILEE UNIT) BURSARY** — A bursary in the amount of \$350 is offered by the Royal Jubilee Unit, Victoria, of the Hospital Employees' Union, Local 180. The award is available to students who are proceeding in the fall from Grade 12 to a full program at the University of British Columbia, the University of Victoria, Simon Fraser University or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma of technology at the B.C. Institute of Technology. To be eligible, an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1st of the year of award but since superannuated). The information given on the application must clearly establish the applicant's connection with Local 180. Present members of the Hospital Employees Union who have had one (1) year of continuous service shall, as well as their children and spouses, be eligible for Bursaries. Bursaries shall be attainable at any postsecondary educational institute. Applications and information may be obtained from Hospital Employees' Union, Loc. 180, #800, 1111 West Georgia St., Vancouver, B.C. V6E 3G7.

**THE HOSPITAL EMPLOYEES' UNION (VANCOUVER GENERAL UNIT) BURSARIES** — two bursaries of \$350 each are offered annually by the Vancouver General Unit of the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade 12 to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. Present members of the Hospital Employees Union who have had one (1) year of continuous service shall, as well as their children and spouses, be eligible for Bursaries. Bursaries shall be attainable at any postsecondary educational institute. Applications and information may be obtained from Hospital Employees' Union, Loc. 180, #800, 1111 West Georgia St., Vancouver, B.C. V6E 3G7.



**THE HOSPITAL EMPLOYEES' UNION (VICTORIA GENERAL UNIT) BURSARY** — A bursary of \$350 is offered by the Victoria General Unit of the Hospital Employees' Union Local 180 to students who are proceeding in the fall from Grade 12 to a full program at the University of British Columbia, University of Victoria, Simon Fraser University, or any of the regional colleges in British Columbia, in any field leading to a degree, or leading to a diploma in technology at the B.C. Institute of Technology. To be eligible an applicant must be the son or daughter of an active member of the Union ("active" being interpreted as on the staff of a hospital within the jurisdiction of Local 180, or on the staff as of January 1 of the year of award but since superannuated). The information given in the form must clearly establish the applicant's connection with Local 180. Present members of the Hospital Employees Union who have had one (1) year of continuous service shall, as well as their children and spouses, be eligible for Bursaries. Bursaries shall be attainable at any postsecondary educational institute. Applications and information may be obtained from Hospital Employees' Union, Loc. 180, #800, 1111 West Georgia St., Vancouver, B.C. V6E 3G7.

**THE LISA HUUS MEMORIAL FUND** — A bursary in the amount of not less than \$1500 will be awarded annually to assist a severely disabled student to undertake or continue his or her postsecondary education at the University of Victoria. Applicants will be considered to have a severe disability provided there are two or more organ systems affected, e.g., muscular system or nervous system. Severe disabilities affecting only one organ system, but satisfying other criteria may be considered under special circumstances. Applications are obtainable from the Financial Aid Office, University of Victoria; or from Mrs. Annie Huus, c/o Development and Community Relations, Queen Alexandra Foundation for Children, 2400 Arbutus Road, Victoria, B.C., V8N 1V7, and must be submitted by no later than May 31.

**THE I.W.A. LOCAL 1-80 BURSARY** — The International Woodworkers of America Local 1-80 offers a bursary in the amount of \$1,000 in open competition to all I.W.A. Local 1-80 members or a spouse, son, or daughter of an I.W.A. Local 1-80 member, or to a person who is wholly supported by a member in good standing of Local 1-80. For the purpose of eligibility in applying for a bursary, the spouse, son, or daughter of a deceased I.W.A. Local 1-80 member in good standing at the time of death, or a member who is retired and was a member of good standing of Local 1-80 at the time of retirement, shall also be eligible. In making the award, the bursary committee will be guided by the following: the average marks obtained by the Grade 12 student during the school term; indication of need; applicants must be in the university program proceeding to any degree-granting university, the B.C. Institute of Technology, or other accredited vocational or technical school to complete a course leading to establishing a career. All those desiring to compete must notify the Financial Secretary of I.W.A. Local 1-80, 351 Brae Road, Duncan, B.C. V9L 3T9 by letter not later than June 21. The I.W.A. Local 1-80 reserves the right to withhold the bursary if no candidate makes sufficiently high standing.

**ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARIES** — The Legion (Pacific Command), offers annually a number of awards for students proceeding from high school to university, and some awards to students entering second, third and fourth year. These bursaries are awarded on the basis of academic standing, financial need and participation and achievement in student and community affairs. Preference is given to sons and daughters of deceased, disabled or other veterans, but applications from other worthy students are also considered. The deadline date for applications is May 1. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2.

## SECTION 3

### UNDERGRADUATE BURSARIES FOR WHICH NO APPLICATION IS NECESSARY

The bursaries listed in this section are open only to students who attended the University of Victoria in the regular Winter Session specified in this Calendar. They are awarded automatically for the following year and applications from students are not required. Students in specific disciplines may wish to discuss their potential eligibility with representatives from the Faculty, School or Department. Winners will be selected by the Senate Committee on Awards upon the recommendations of the Student Financial Aid Services Office.

#### General Bursaries

\* **THE WILLIAM AND AUDREY ADAMS BURSARY FUND** — One or more bursaries will be awarded annually to students who have demonstrated strong involvement in extracurricular activities.

\* **SUTRO BANCROFT BURSARY** — A bursary of \$500 will be awarded to a deserving and promising student continuing studies at the University of Victoria.

\* **BETA SIGMA PHI SORORITY ELIZABETH FORBES BURSARY** — An award of \$200 to be awarded annually to a promising and deserving woman entering third or fourth year Arts and Science or Education at the University of Victoria.

\* **THE BRITISH COLUMBIA TELEPHONE COMPANY BURSARY** — A bursary valued at seven hundred and fifty dollars (\$750) will be awarded to a student in any undergraduate discipline who has completed first year, and is proceeding directly to second year, at the University of Victoria.

\* **THE THOMAS HENRY (HARRY) AND DORIS COLLOM BURSARY** — Three or more bursaries will be awarded to students entering second or third year in music. If there are insufficient qualified music students, bursaries will be awarded to second or third year science students. Preference will be given to students born in British Columbia or the United Kingdom.

\* **GERALD G. AND LOTTIE FEW ENDOWMENT FUND** — One or more bursaries will be awarded annually.

\* **THE NELS GRANEWALL BURSARY FUND** — One or more awards are made to students in any undergraduate discipline entering their graduating year who demonstrate a need for financial assistance. Preference will be given to students with family responsibilities whose permanent residence is outside of Greater Victoria. The awards are made available through the donation of the 1984 Graduating Class to commemorate the twenty-first birthday of the University of Victoria.

\* **DIANE MARY HALLAM, R.N. BURSARY** — A number of bursaries will be awarded annually.

\* **THE MARGARET LAURIE BURSARY** — One or more bursaries are awarded to students currently enrolled at the University of Victoria. Preference will be given to students of Chinese ancestry.

\* **THE ELIZABETH LOCKHART BURSARY** — One or more bursaries are awarded annually.

\* **SUE MACDONALD MEMORIAL BURSARY FUND** — One or more awards are available annually on the basis of financial need.

\* **ALEC McNAB AND NEVILLE MUNSON EMERGENCY FUND** — One or more awards are available annually on the basis of financial need.

\* **DONNA NICKEL MEMORIAL BURSARY** — To honour the memory of Mrs. Donna J. Nickel of Penticton, a bursary will be awarded to a student continuing studies at the University of Victoria, with preference to B.C. residents.

**THE UNIVERSITY OF VICTORIA FACULTY BURSARIES** — approximately 25 bursaries of \$500 are awarded annually on the basis of financial need and reasonable academic standing. The fund for these awards was established by donations of University of Victoria faculty members and professional librarians.

\* **FORREST L. SHAW EMERGENCY FUND** — One or more awards are available annually on the basis of financial need.

\* **B & B SIVERTZ BURSARY** — two bursaries valued at \$800 each have been endowed by Mr. and Mrs. B.G. Sivertz of Victoria, B.C.

\* Administered by the University of Victoria Foundation.



\* **THE JAMES ELLISON CAMPBELL TAYLOR BURSARY FUND** — Several bursaries are to be awarded annually to students registered at the University of Victoria.

\* **THE UVIC ALUMNI BURSARY FOR MATURE STUDENTS** — One or more bursaries will be awarded annually.

**THE VICTORIA CENTRAL LIONS CLUB MEMORIAL BURSARIES** — One or more bursaries are awarded to second or third year students who are continuing studies at the University of Victoria.

\* **THE VICTORIA COLLEGE CRAIGDARROCH CASTLE ALUMNI ASSOCIATION BURSARY** — A number of bursaries will be awarded annually on the basis of financial need and academic performance to undergraduates who have completed at least one year in the Faculty of Arts and Science and are working towards a B.A., B.Sc., or B.Ed. degree. Recipients must be residents of British Columbia.

**VIKES ATHLETIC AWARD** — Dependent on funding, a limited number of \$1500 awards may be available to continuing students at the University of Victoria who have previously demonstrated excellence in inter university and/or extra mural athletics. To be eligible, students (male and female) competing in basketball, soccer, volleyball, swimming, cross country, middle distance and rowing, and in men's rugby and women's field hockey must have successfully completed at least nine (9) units the previous academic year and must be registered in nine (9) units the year in which they are to receive the award. This award is administered by Student Financial Aid Services in consultation with the Manager of Athletics and Recreational Services. For more information contact the Manager of Athletics and Recreational Services.

\* **THE WEBER MEMORIAL BURSARY** — \$150 to be awarded annually in memory of Mr. and Mrs. E. Weber, to the most deserving student in the third year. Academic standing, citizenship and need are all to be taken into consideration.

#### **Undergraduate Awards Listed by Course or Area of Study**

Winners will be selected by the Senate Committee on Awards upon the recommendation of the appropriate Department or Faculty.

#### **Biochemistry and Microbiology**

\* **GERHART B. FRIEDMANN BURSARY** — A bursary is awarded annually to a student entering year 2 or 3 of an Honours or Major program in the Departments of Biochemistry and Microbiology, Biology, Chemistry, Mathematics and Statistics, and Physics and Astronomy.

\* **THE ALLEN P. JAMES BURSARY** — One or more bursaries are awarded to students entering year 4 programs offered by the Department of Biochemistry and Microbiology or the Department of Biology.

\* **THE DR. ERNST VON RUDLOFF BURSARY IN BIOCHEMISTRY** — An award of \$800 is made annually to a student beginning year 3 or 4 of a major or honours program in Biochemistry. The award is open to all students in this program, especially those interested in plant biochemistry. The award will be based on academic standing and financial need.

\* **THE ADA AND ROBERT LE GRYS MEMORIAL BURSARY IN BIOCHEMISTRY AND/OR MICROBIOLOGY** — A bursary of \$600 is awarded annually, on the basis of financial need and academic performance, to a student participating in a major or honours program in Biochemistry and/or Microbiology which bears on human conditions — with special emphasis on human nutritional requirements and related subjects.

\* **THE HUGH AND LILIAN SALMOND BURSARIES IN BIOCHEMISTRY AND/OR MICROBIOLOGY** — two awards of \$750 each are made annually, on the basis of financial need and academic performance, to students participating in major or honours programs in biochemistry and/or microbiology which bear on human conditions (1) such as respiratory diseases ... particularly asthma, bronchial asthma, etc., and (2) with special emphasis on the body's immune system and allergic reactions.

#### **Biology**

\* **F.W. BENTON MEMORIAL BURSARY** — An award will be made to a 4th year or graduate student in the biological sciences with a special interest in salmonids or marine environmental studies and who is studying or doing research at the Bamfield Marine Station. This bursary is given to assist in the continuance of F.W. Benton's work in wilderness preservation.

\* **THE DR. MICHAEL BIGG MEMORIAL BURSARY** — An award will be made annually to a student enrolled in third or fourth year Marine Biology courses. Preference will be given to students interested in killer whale or other large marine mammal research and to former students of the Cowichan Senior Secondary School, Duncan, B.C., specializing in that field of study.

\* **THE HOWARD ENGLISH VICTORIA FISH AND GAME BURSARY** — The Victoria Fish and Game Protective Association will present a bursary in the amount of \$500 annually to a student entering fourth year in Biological Sciences and who shows demonstrated interest in conservation, especially as applied to aquatic ecology (biology). If funds permit, a second award will be given.

\* **GERHART B. FRIEDMANN BURSARY** — A bursary is awarded annually to a student entering year 2 or 3 of an Honours or Major program in the Departments of Biochemistry and Microbiology, Biology, Chemistry, Mathematics and Statistics, and Physics and Astronomy.

\* **THE ALLEN P. JAMES BURSARY** — One or more bursaries are awarded to students entering year 4 programs offered by the Department of Biochemistry and Microbiology or the Department of Biology.

\* **THE G. MORLEY NEAL MEMORIAL BURSARY** — An award of at least \$1,000 is made annually to a student entering year 4 of a biology honours or major program, who has a good academic standing and is in financial need.

**THE SAMUEL SIMCO BURSARIES** — A bursary of \$650, established by the Victoria Natural History Society from funds bequeathed for this purpose by the late Mr. Samuel Simco, will be awarded to a student entering third or fourth year in a major or honours program in Biology who is specializing in the area of species or habitat conservation.

#### **Business**

**THE SOHAN JAWL BURSARY** — A bursary of \$1,000 is awarded to a student continuing studies at the University of Victoria, and intending to pursue a degree in either Commerce or Business and Administrative Studies.

#### **Chemistry**

\* **GERHART B. FRIEDMANN BURSARY** — A bursary is awarded annually to a student entering year 2 or 3 of an Honours or Major program in the Departments of Biochemistry and Microbiology, Biology, Chemistry, Mathematics and Statistics, and Physics and Astronomy.

#### **Child and Youth Care**

\* **THE WINNIFRED M. CLARK BURSARY** — A bursary established by the Capital Region Association for the Mentally Handicapped will be awarded annually to a needy student entering the fourth year of the Child Care program specializing in the study of mental retardation.

\* **OLIVER C. WOLSEY BURSARY FUND** — An award will be made annually to a student proceeding to year three or four in the School of Child and Youth Care who has demonstrated ability in dealing with severely handicapped children.

#### **Creative Writing**

\* **THE PATTI BARKER BURSARY IN CREATIVE WRITING** — A bursary is awarded annually to a student in a first or second year Creative Writing course.

\* **THE CYRIL AND FRANCES GAGNON BURSARY** — A bursary of up to \$700 will be awarded annually to a needy 3rd or 4th year student in the Department of Creative Writing who was born in British Columbia and is or was a resident of a rural area of British Columbia.

\* **THE RITA PERRY HAMMET BURSARY** — A bursary is awarded to a continuing student in Writing.

\* **THE HAZEL PARTRIDGE-SMITH BURSARY IN CREATIVE WRITING** — An award will be given to a second, third or fourth year student in Creative Writing.

\* Administered by the University of Victoria Foundation.



## Economics

**THE SOHAN JAWL BURSARY** — A bursary of \$1,000 is awarded to a student continuing studies at the University of Victoria, and intending to pursue a degree in either Commerce or Business and Administrative Studies.

**TALISMAN ENERGY BURSARY** — An award of \$1,000 is offered annually to a student continuing studies at the University of Victoria in either Economics or Engineering. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering and the Department of Economics.

## Education

**CAMERON MEMORIAL TRUST BURSARY** — One or more bursaries will be awarded annually to students who are continuing their studies in the Faculty of Education.

\* **THE G. CLIFFORD CARL MEMORIAL BURSARY** — \$500 awarded to a deserving student entering year 3, 4 or 5 or in the undergraduate certification program in the Faculty of Education and specializing in Biological Sciences or Outdoor Education.

\* **THE CLEARHUE BURSARY** — \$850 awarded annually to a promising and deserving student in the Faculty of Education, who shows promise and who has at least a good second-class average.

\* **THE GOLDY CROSS MEMORIAL — SAANICH ROTARY BURSARY** — An award will be made annually to a student intending to teach at the primary level and who is entering the Professional year in the Faculty of Education. This award is based on need and a good standing in practica and academic work.

\* **THE FOX MEMORIAL BURSARY** — An award of at least \$750 will be made to a deserving student entering year 3, 4 or 5 in the Elementary Curriculum of the Faculty of Education, who has at least a good second-class average. If funds permit, a second award will be given.

\* **THE MADGE HOGARTH BURSARY FUND** — One or more bursaries totalling approximately \$1,000 are awarded annually to students entering the Professional Year, including the Post Degree Professional program, in the Faculty of Education.

**THE LAURETTA HOLDRIDGE BURSARY** — A bursary of \$500 is awarded to a student who is entering second year in primary education.

\* **THE JAMES WILSON HORNE MEMORIAL BURSARY FUND** — Awards of at least \$700 will be made to students who have received undergraduate degrees from the University of Victoria and are continuing studies in the Post Degree Professional Programs in the Faculty of Education. The recipients must demonstrate outstanding interest in education and financial need.

\* **THE KATHLEEN M. HOYTE MEMORIAL BURSARY** — An award will be made annually to a fifth year student in the Faculty of Education specializing in early childhood education.

\* **THE GODFREY LAWRENCE STEVENS LEE PHYSICAL EDUCATION BURSARY** — An award of \$300 is made annually to a deserving School of Physical Education student proceeding to year 2, 3 or 4 of the B.Sc. program with a major in Kinesiology.

\* **THE CORALIE L. LOMAS MEMORIAL CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION BURSARY** — \$300 is awarded annually to a student who has completed first year and is proceeding toward a B.Ed. degree with a teaching area in Physical Education. Applicants should demonstrate a need for assistance, and show evidence of a particular interest and aptitude in Physical Education plus general proficiency in academic work.

\* **THE NATIVE DAUGHTERS OF BRITISH COLUMBIA BURSARY** — \$300 is awarded annually to a deserving British Columbia native Indian student completing year 2, 3 or 4 in the Faculty of Education.

\* **THE GUNNER SHAW MEMORIAL BURSARY** — An award of \$600 is made annually on the basis of financial need and academic performance to a Vancouver Island resident entering year one of the Physical Education program.

\* **THE TAYLOR EDUCATION BURSARIES** — Annual awards will be made to fourth year students showing outstanding ability and interest in Education and needing financial assistance. If no qualifying students are enrolled in fourth year, the bursaries may be awarded the next year

or be presented to qualified students of the fifth year, at the discretion of the Faculty of Education. The award commemorates the interest in Education by the Taylor family of Victoria.

## Engineering

\* **ASSOCIATION OF PROFESSIONAL ENGINEERS OF BRITISH COLUMBIA (VICTORIA BRANCH) BURSARY** — Bursaries of varying amounts will be awarded annually to students entering the second year of Engineering at the University of Victoria. The assessment of academic standing will be based upon performance during the first year of Engineering at a British Columbia university or community college.

**THE GROUP OF PROFESSIONAL ENGINEERS OF B.C. HYDRO BURSARY** — A bursary is awarded to a student entering 3rd year of the Bachelor of Engineering Program in the Faculty of Engineering.

\* **THE ALLAN AND ELIZABETH McKINNON BURSARY IN ENGINEERING** — An award of \$1,200 is made annually, on the basis of financial need and academic performance, to a student entering or continuing studies in the Faculty of Engineering.

\* **HUGH AND LILIAN SALMOND BURSARIES** — two awards of \$750 each are made annually, on the basis of financial need and academic performance, to students in the Faculty of Engineering.

**TALISMAN ENERGY BURSARY** — An award of \$1000 is offered annually to a student continuing studies at the University of Victoria in either Economics or Engineering. Selection will be made by the Senate Committee on Awards upon the recommendation of the Faculty of Engineering and the Department of Economics.

## English

\* **ROGER AND AILSA BISHOP BURSARY FUND** — An award of \$500 is made annually to a deserving student proceeding to year three or four of an honours or major program in the Department of English.

\* **THE GERALD SPENCER (AB) & MARION KENT BURSARY IN ENGLISH** — A bursary will be given to a third or fourth year student.

\* **THE IRENE LEE BURSARY IN ENGLISH** — An award of \$300 is made annually to a deserving student proceeding to year 3 or 4 of an Honours or Major program in the Department of English.

\* **ROYAL BRIDE CHAPTER IODE BURSARY** — One or more bursaries are awarded to students who have completed a first year English course.

## Environmental Studies

\* **ECO-SYSTEM BURSARY** — A bursary of \$375 is awarded annually to an undergraduate student with at least third year standing who is pursuing a Major or Minor degree in Environmental Studies.

## French

\* **THE MAJOR KEITH W.A. MACDOUGALL MEMORIAL BURSARY** — A bursary of \$250 will be awarded annually to a deserving undergraduate student in need of assistance who is majoring in French and who is interested in continuing studies in the field.

## Health Information Science

\* **BARBARA THORNTON MEMORIAL BURSARY FUND** — A bursary is awarded annually to a student entering the first year in the Health Information Science program.

**VICTORIA MEDICAL SOCIETY BURSARY** — An award of \$750 is made annually to an outstanding student in financial need, who is proceeding to year 3 or 4 of the Health Information Science program.

## Hispanic and Italian Studies

**THE ITALIAN ASSISTANCE CENTRE BURSARY** — \$250 to be granted annually to two needy students who have shown proficiency in the Italian language and who will be returning to the University of Victoria for further studies in Italian.

## History

\* **CANADIAN DAUGHTERS' LEAGUE, ASSEMBLY NO. 5 — GERTRUDE M. RALSTON MEMORIAL BURSARY** — \$200 awarded to a deserving student, preferably one in Canadian history.

\* Administered by the University of Victoria Foundation.



\* **THE ELSIE G. TURNBULL BURSARY IN BRITISH COLUMBIA HISTORY** — An award will be made annually to a student who has successfully completed at least one year of studies and is registered in a course in the history of British Columbia in the following year.

#### Law

\* **CARIBOO BAR ASSOCIATION BURSARY** — One or more bursaries totalling \$1,000 will be awarded annually to a student in the Faculty of Law who has demonstrated good academic standing and financial need. Preference will be given to a student from the area of the Province of British Columbia served by the Cariboo Bar Association.

\* **THE HONOURABLE THOMAS A. DOHM, Q.C., LL.D., ACADEMIC LAW FACULTY ENTRANCE BURSARY** — A bursary of \$1000 will be awarded annually to an entering student who demonstrates financial need. Preference will be given to a student with strong academic credentials who is disadvantaged racially or ethnically, physically disabled or from an economically deprived background.

\* **THE NANCY JOHNSON MEMORIAL BURSARY** — A bursary of \$200 will be awarded annually to a student in the Faculty of Law who has encouraged and supported fellow students and demonstrated academic achievement, determination and hard work, and who is in need of financial assistance.

\* **THE CONSTABLE IAN D. JORDAN BURSARY FUND** — An annual bursary or bursaries in the amount of \$2000 or more has been established to assist deserving students in the Faculty of Law. The award is designed to aid students who have family responsibilities, who need financial help to further their education, and who have an interest in criminal law. The bursary was established to honour the contributions to the Law School and to law enforcement of Ian Jordan, a 1984 UVic graduate, seriously injured in 1987 while on duty with the Victoria City Police.

**KELOWNA BAR ASSOCIATION BURSARY** — A bursary of \$500 is awarded to a student entering second or third year of the LL.B program from the Okanagan area who has demonstrated academic success and financial need. Preference will be given to a student supporting family members or carrying similar financial obligations while attending the Faculty of Law.

\* **THE LIFE UNDERWRITERS ASSOCIATION OF CANADA EDUCATIONAL FOUNDATION BURSARY IN LAW** — A bursary of \$100 is awarded annually to a student in the Faculty of Law who demonstrates financial need.

**THE MICKEY MORAN MEMORIAL BURSARY** — A bursary of \$350 is awarded annually on the basis of financial need and the student's contribution to and achievement in courses related to litigation and criminal law. The award, sponsored by the Kootenay Bar Association, honours the late Mickey Moran, Q.C. for his achievements in the practice of criminal law.

\* **THE JEAN MARIE SHERWIN BURSARY IN LAW** — A bursary of \$500 is awarded to a student in the first or second year of the Law program who has demonstrated superior ability, enthusiasm and aptitude in the study of Law and is in need of financial assistance.

\* **THE HUGH STEPHEN BURSARY** — A bursary of \$900, established by Mr. Hugh Stephen, is awarded annually to a student in the Faculty of Law who needs financial assistance to complete legal studies. An applicant's contribution to the activities of the Faculty and academic record may be considered when applications for the bursary are evaluated.

**VICTORIA BAR ASSOCIATION BURSARY** — A bursary of \$2000 will be awarded annually to a student in either second or third year in the Faculty of Law who has demonstrated outstanding service to fellow students and the Faculty.

\* **LYN WAYLAND MEMORIAL BURSARY** — An award will be made annually in memory of Lyn Wayland to honour her accomplishments, her contribution to the Faculty of Law, and her personal success as an aboriginal person in the face of many obstacles. The award is made to a law student who has made a contribution to the community or to the Faculty of Law. Preference will be given to an aboriginal student. The nominee will be selected by representatives of the aboriginal law students in consultation with the Dean of the Faculty of Law.

\* **THE JOHN WIGHT MEMORIAL BURSARY** — A bursary of \$300 is awarded annually by the Faculty of Law to a student who has completed the first year of the LL.B. program and who, in addition to a record of academic merit in the Faculty, is deemed to be a worthy recipient in need of financial assistance.

#### Mathematics and Statistics

\* **GERHART B. FRIEDMANN BURSARY** — A bursary is awarded annually to a student entering year 2 or 3 of an Honours or Major program in the Departments of Biochemistry and Microbiology, Biology, Chemistry, Mathematics and Statistics, and Physics and Astronomy.

#### Music

\* **THE GEORGE JENNINGS BURNETT MEMORIAL BURSARY** — An award of \$700 is made annually to a student specializing in organ or composition in a Bachelor of Music program. Preference will be given to a student who needs financial assistance to continue in the program.

**THE CLIFF-MARCEL BURSARIES** — One or more bursaries are given to students entering their second, third or fourth year in the School of Music. Preference will be given to students having a specific interest in the violin.

\* **THE GLENN AND MARY DAUGHARTY BURSARY IN MUSIC** — An award will be made annually to a student in the Bachelor of Music program.

\* **THE JAMES B. KENNEDY MEMORIAL BURSARY** — A bursary is awarded to a student entering or continuing in the School of Music whose principal instrument is flute, oboe, bassoon or recorder.

\* **PAUL GREGORY KUSS MEMORIAL BURSARY** — A bursary of \$150 is awarded annually to a newly admitted or returning Music student.

\* **THE BERNARD NAYLOR MEMORIAL BURSARY IN MUSIC** — Up to \$400 is awarded annually to a student in the School of Music who shows evidence of outstanding performance in the University Chorus.

\* **THE ST. JUDE BURSARY** — One or more awards are made annually to student(s) pursuing a Bachelor of Music degree with a performance major in voice. The student(s) must demonstrate financial need and display vocal and academic excellence. The recipients may be newly admitted or returning students.

**THE NORVAL SCHROEDER BURSARY** — A bursary of \$1200, or such higher value as the donor may determine, will be awarded annually to a deserving student of an orchestral instrument in any year of the Bachelor of Music program.

\* **THE BEA SCOTT BURSARY IN MUSIC** — One or more bursaries will be awarded to a student or students, newly admitted or continuing, pursuing a degree in the voice program in the School of Music.

#### Nursing

**BRITISH COLUMBIA LUNG ASSOCIATION — CHRISTMAS SEAL SOCIETY BURSARY** — A bursary of \$1000 will be awarded annually by the British Columbia Lung Association-Christmas Seal Society to a needy student entering the final year in the Nursing Program.

\* **THE KATHLEEN NORA COMERFORD MEMORIAL BURSARY** — A bursary is awarded to an undergraduate student who is continuing studies in the Nursing Program. Preference will be given to a student showing an interest in Public Health Nursing.

\* **THE LILY HARRIS MEMORIAL BURSARY** — A bursary of \$600 has been established in memory of Miss Harris who was a teacher of nursing in China for many years. If funds permit, a second award will be given. The award will be made annually to a needy female student in the School of Nursing.

\* **THE STEVE PETERSON MEMORIAL BURSARY IN NURSING** — A bursary of at least \$1,000 will be awarded annually to a needy student in the School of Nursing, who has a strong academic record.

\* Administered by the University of Victoria Foundation.



\* **MAYO SINGH-JOGINDER KOUR MAYO SAROYA MEMORIAL BURSARY** — A bursary of \$200 will be awarded annually to a needy student in the School of Nursing.

**THE HAROLD AND MYRA THOMPSON MEMORIAL BURSARIES** — two bursaries of \$850 each will be awarded annually to needy students demonstrating an interest in chronic and/or long term nursing.

#### **Pacific and Asian Studies**

\* **THE CHINA EXCHANGE BURSARY** — In order to encourage student exchanges between the University of Victoria and East China Normal University, a bursary of \$500 will be awarded to a student from the University of Victoria attending the East China Normal University, or to a student from the East China Normal University attending the University of Victoria. Should unforeseen circumstances arise whereby no exchange is possible in a given year, the bursary may be awarded to a University of Victoria student who is enrolled in a program within the Department of Pacific and Asian Studies and who has demonstrated financial need, reasonable academic standing and an interest in the study of China.

#### **Physics and Astronomy**

\* **GERHART B. FRIEDMANN BURSARY** — A bursary is awarded annually to a student entering year 2 or 3 of an Honours or Major program in the Departments of Biochemistry and Microbiology, Biology, Chemistry, Mathematics and Statistics, and Physics and Astronomy.

#### **Political Science**

\* **THE SCOTT WALLACE BURSARY** — A bursary of \$300 will be awarded annually to a needy third year student majoring in Political Science who has demonstrated a sense of community responsibility and awareness of an obligation to serve society through active membership in various campus or community organizations. Although applications are not required for this bursary, students who consider themselves eligible for it are invited to communicate with the Chair or Secretary of the Department.

#### **Social Work**

\* **THE ARTHUR C. ABRAHAMSON MEMORIAL BURSARIES** — Two bursaries of \$200 each will be awarded to students in the Distance Education Bachelor of Social Work Program. The intent of the bursaries is to assist students who encounter severe financial difficulties in returning to full or part time studies. The bursaries are awarded in memory of Arthur C. (Art) Abrahamson who, as a consultant to the School of Social Work in its early years, was a source of immense help to students and faculty.

\* **THE DIANNE BOURNE MEMORIAL BURSARY** — A bursary is offered to a full or part-time student admitted to the School of Social Work, who is in or is planning a career in child welfare practice in northern British Columbia.

\* **THE JEAN MARIE SHERWIN BURSARY** — A bursary of \$500 is awarded to a student in the School of Social Work who has completed third year, is proceeding to fourth year and whose need for financial aid is such that the usual sources of assistance are not sufficient. Preference will be given to students with family responsibilities and whose permanent residence is outside Greater Victoria.

**THE SARA SPENCER FOUNDATION BURSARIES** — Four bursaries, each of \$1450, will be awarded to third year students in the School of Social Work whose need for financial aid is such that the usual sources of assistance will not suffice. Preference will be given to students with family responsibilities and students whose permanent residence is outside Greater Victoria.

\* **THE ROY E.L. WATSON BURSARIES IN SOCIAL WORK** — Three undergraduate bursaries and one graduate bursary are awarded to single parents registered in degree programs in Social Work.

#### **Theatre**

\* **THE FINLAYSON BURSARY** — A bursary of \$500, made available by Mr. Albert Winkel of Victoria, is offered to a second or third year student in the Department of Theatre who can show evidence of financial need and outstanding ability in the area of technical theatre and who is continuing studies in the Department.

\* **THE NIGEL LEACH MEMORIAL BURSARY** — A bursary is awarded annually to a student who has completed third year and is entering fourth year Acting in the Theatre program and who displays outstanding promise in Shakespearean interpretation.

\* **THE PHOENIX THEATRE BURSARY** — An award will be made annually to two or more students in the Department of Theatre. Academic standing, contribution to the Department's activities, and the financial circumstances of the student will be considered.

\* **THE W.D. WEST ALUMNI BURSARY FUND** — Bursaries from this fund are to be awarded annually to continuing students primarily according to need. Preference will be given to students specializing in Design. Recipients should have demonstrated promise, industry and a reasonable academic standard.

#### **Visual Arts**

\* **THE PATRICIA BEER BURSARY** — One or more bursaries are awarded to a student or students entering or returning to an undergraduate or graduate program in Visual Arts. In the case of a graduate award, selection will be made by the Graduate Admissions and Awards Committee upon the recommendation of the Department of Visual Arts.

\* **THE FRANCES TRAPP (BROWN) CAMERON MEMORIAL BURSARY IN VISUAL ARTS** — A bursary is awarded to a graduate of Victoria High School who is entering second year of the Visual Arts program.

\* **THE JOHN DOBEREINER MEMORIAL BURSARY** — A bursary of \$300 will be awarded annually to a worthy and needy undergraduate student who plans to pursue a career in Art.

**THE HELEN PITT FUND BURSARIES IN FINE ARTS** — Two or more bursaries will be awarded annually to third year students in the Department of Visual Arts, who demonstrate merit and financial need. Preference will be given to full-time Visual Arts students from and in the Municipal District surrounding Vernon, B.C.

#### **Women's Studies**

**THE HAMBER FOUNDATION WOMEN'S STUDIES BURSARIES** — Four \$1000 bursaries are awarded to third or fourth year students with a declared major in Women's Studies.

\* **THE PETCH BURSARY IN WOMEN'S STUDIES** — One or more bursaries of \$400 each will be awarded to a student with a declared major in Women's Studies.

## **SECTION 4**

### **UNIVERSITY BURSARIES REQUIRING APPLICATION**

#### **A. UNDERGRADUATE BURSARIES FOR WHICH APPLICATION MUST BE MADE AT THE UNIVERSITY OF VICTORIA**

The bursaries listed in this section are open only to students who attended the University of Victoria in the Winter Session specified in this Calendar. They are awarded for the following year. Application for these bursaries must be made before April 30, unless otherwise indicated, on forms available from the Student Financial Aid Services

Office, Second Floor, University Centre. Winners will be selected by the Senate Committee on Awards.

**THE BETA SIGMA PHI BURSARY FUND** — Two bursaries each valued at \$500 will be awarded to students continuing their studies at the University of Victoria. These awards are open only to Beta Sigma Phi International members in good standing or to their sons, daughters, grandsons and granddaughters.

\* **THE BEVAN BURSARY** — One or two bursaries totalling \$600, will be awarded annually to a student(s) who is severely disabled by either

\* Administered by the University of Victoria Foundation.



deafness, blindness, or arthritis, or is otherwise seriously handicapped, and who is beginning or continuing studies at the University of Victoria. If no such student applies, the award may be given to any needy student. This bursary was established by Mrs. Ivy B. (Pat) Bevan in memory of her late husband, Albert S. (Bert) Bevan.

**THE BIRKS FAMILY FOUNDATION** — The Birks Family Foundation has established a plan of annual contributions to the Student Aid Fund of recognized Canadian Universities for the creation of the Birks Family Foundation Bursaries. The Bursaries are awarded by the Foundation on the recommendation of the University Scholarship Committee and are not restricted to the faculty or year and may be renewed. The number and amount of such awards may vary annually, depending upon the funds available for this purpose from the foundation.

**B.C. TEACHERS CREDIT UNION BURSARY** — A bursary of \$500, a gift of the B.C. Teachers Credit Union, is offered at the University of Victoria. It will be open to sons and daughters of B.C. Teachers Credit Union members and to regular members. This award is available to a candidate in any year of the Faculty of Education. The award will be made on the basis of standing and need.

**\* THE GORDON CUTHBERT MEMORIAL BURSARY** — A bursary of \$100 will be awarded annually, in memory of James Gordon Cuthbert, who was a lifetime advocate of higher education. The award will be made to a student, on the basis of academic achievement and financial need, who has completed pre-medical studies at the University of Victoria and is proceeding to medical school the following September.

**HOWARD GERWING RUGBY BURSARY** — A bursary will be awarded to a promising rugby player in the University of Victoria rugby program entering second year.

**\* THE JOSEPH B. JACKSON BURSARY** — A bursary of equivalent value to six fee units per calendar year will be awarded annually to a single parent who is a mature student and a member of the Holy Cross Parish in Victoria, who is undertaking part-time studies at the University of Victoria in an undergraduate program. Renewal to a maximum of 30 fee units is dependent on the maintenance of an acceptable academic average. Some assistance with the purchase of books is also anticipated.

If there is no suitable candidate from Holy Cross Parish, the bursary may be awarded to a student who meets the other criteria and is a resident of Vancouver Island.

Applications may be made to Student Financial Aid Services or directly to Holy Cross Parish.

Recommendations will be made by a selection committee comprising two members of Holy Cross Parish, and, if possible, a member of the Parish who is also on the Faculty of the University.

**THE DANIEL JACOB MEMORIAL BURSARY FUND** — Through the generosity of the Alma Mater Society, a special fund has been established to commemorate Daniel Jacob, a student who died accidentally in November, 1981. The purpose of the fund is to assist financially needy students who may otherwise be forced to postpone or discontinue their academic career. All undergraduate students attending the University of Victoria who can demonstrate need may apply for assistance. If the circumstances warrant, bursaries may be granted for more than one year. Students may inquire about this fund at the Student Financial Aid Services Office and must arrange an interview with an officer.

**\* THE JUBILEE YEAR GRADUATING CLASS BURSARY FUND** — A bursary valued at \$300 will be awarded annually to a student enrolling in the graduating year and carrying a full course load. Students with an academic standing of second class or better will be considered if they demonstrate genuine need. The award is made available through the generous donations of graduating classes at the University. The 1978 Graduating Class made a significant contribution to commemorate 75 years of higher education in Victoria.

**THE CHARLES CHAN KENT GOLDEN WEDDING ANNIVERSARY BURSARY** — A bursary of \$500, the gift of The Charles Chan Kent Foundation, is offered to students who are proceeding to a degree in any field, having successfully completed at least one year at the University of Victoria and in need of financial assistance. The bursary will be awarded to a student of Chinese extraction.

**\* HAZEL T. KNOX MEMORIAL BURSARY** — One or more bursaries are awarded annually to students enrolled in an honours program and continuing into the third or fourth year at the University of Victoria.

**\* THE DR. DOUGLAS H. TAYLOR LEE MEMORIAL BURSARY** — \$450 awarded annually to a second or third year student planning a career in medicine with overriding preference given to a female student with first class honours standing. The applicant must be studying in the general area of the basic medical sciences, on a premedicine program.

**\* THE STEVE PETERSON MEMORIAL BURSARY IN MEDICINE** — A bursary of at least \$400 will be awarded annually to a needy student following a Pre medicine program at the University of Victoria, who has a strong academic record and has demonstrated interest in a career in medicine.

**PROVINCIAL WOMEN'S PROGRAMS BURSARIES** — Two bursaries each of \$500 will be awarded annually to female students at the University of Victoria enrolled in either a full or part-time program of not less than one year duration.

**\* PENINSULA CONSUMER SERVICES COOPERATIVE BURSARY** — A bursary is awarded annually to a promising student at the University of Victoria who is a member or the daughter or son of a member of the Peninsula Consumer Services Cooperative.

**THE UNIVERSITY WOMEN'S CLUB OF VICTORIA RECENT GRADS BURSARY** — A bursary of \$850 is awarded annually to a female student whose education was interrupted for five years or more and who is returning to studies toward a first degree in any faculty at the University of Victoria.

**THE VICTORIA MEDICAL SOCIETY BURSARY** — \$1000 to be awarded annually to a second year student of outstanding merit and promise, who has a high general academic standing and qualities of character indicating worthiness to hold the bursary. Preference will be given to a needy student studying in the general area of the basic medical sciences, on a pre medicine program.

**THE VICTORIA REAL ESTATE BOARD AWARDS** — \$1000 awarded annually as a scholarship and \$1000 awarded annually as a bursary, to students registered at the University of Victoria who are dependents of members of the Victoria Real Estate Board. Students registered at the University of Victoria who find that they must transfer to another university in order to complete their chosen program are eligible to apply for these awards.

**\* THE CHRISTOPHER E. WILKS MEMORIAL BURSARY FUND** — This fund was established by Mr. Harry Wilks in memory of his beloved son, Christopher, who died accidentally in December 1974. The purpose of the fund is to financially assist deserving students to pursue an academic career who otherwise may be forced to postpone or discontinue their studies. All undergraduate students attending the University of Victoria who can demonstrate need may apply for assistance. Should circumstances arise where more students apply for assistance than available funds will cover, the decision as to which students will receive assistance will be governed by the areas of study, with preference given to studies in the Humanities. If their financial circumstances continue to warrant such assistance, bursaries may be granted to the same students in subsequent years while attending the University of Victoria. Every applicant must be interviewed by an officer of the Financial Aid Office.

**\* THE FRANK WING MEMORIAL BURSARIES** — Awards will be given annually to students of Native Indian or oriental ancestry who demonstrate financial need. Students of other minorities will be considered (if there are no applicants from the two ancestral groups). The awards, donated by Caroline S. Chan, are available to students entering or continuing studies at the University of Victoria. Band affiliation must be documented. Application must be made before September 30. Every applicant must be interviewed by an officer of the Financial Aid Office.

**\* WALTER AND CHARLOTTE YEAMENS BURSARY** — Two bursaries of up to \$500 each are awarded to second, third or fourth year students who have participated in the varsity basketball program. Preference will be given to students from the Greater Victoria area.

#### **B. UNDERGRADUATE BURSARY ADMINISTERED BY THE UNIVERSITY OF BRITISH COLUMBIA**

Application forms for the following bursary may be obtained in late March from the Office of Awards and Financial Aid, the University of British Columbia, Brook Hall, Room 1036-1874 East Mall, Vancouver, B.C. V6T 1Z1, and must be returned by June 30. Students competing

\* Administered by the University of Victoria Foundation.



for bursaries on the basis of attendance at the University of Victoria must forward an official transcript of their academic record preferably accompanying the application. Since some changes may have been made after this calendar went to press, you are urged to refer to the Awards and Financial Aid Supplement to the U.B.C. Calendar.

**THE VICTORIA HOME ECONOMICS AND DIETETIC ASSOCIATION BURSARY** — This bursary of \$400, the gift of the Victoria Home Economics and Dietetic Association, will be awarded annually to a woman student whose home is in Victoria or some centre on Vancouver Island, and who is entering the second, third or fourth year in the Department of Home Economics at the University of British Columbia. The award will be made on the basis of financial need to a student of good academic standing.

#### C. UNDERGRADUATE BURSARIES ADMINISTERED BY OTHERS

Application forms for the following bursaries are obtained by writing directly to the donor at the address provided in the terms of reference for the bursary. Deadlines for submitting completed application forms are also provided.

**HUGH CHRISTIE MEMORIAL BURSARY** — \$500 for students pursuing a career in Corrections, International Development, Social Work or YM-YWCA. Must be a full time student registered in the Faculty of Physical Education, Recreation, Social Work, Criminology or related fields. Application should be supported by letter(s) of reference. Application must be in writing, giving full particulars, i.e., name, address, age, together with reason for applying for this bursary (in 500 words or less). Send application to: Mr. Graham Christie, Chairman, Hugh Christie Memorial Bursary Committee, South Slope Family YMCA, 282 W. 49th Avenue, Vancouver, B.C., V5Y 2Z5. Closing date for applications is mid-November.

**KIT DAVISON BURSARY** — Two bursaries of \$500-\$800 each have been established by friends and business associates to honour Mrs. Kit Davison. The bursaries will be used to assist students who have a neuromuscular disorder and are registered with the Muscular Dystrophy Association of Canada. The awards are tenable at any post-secondary institution in British Columbia. Applications are available from the Muscular Dystrophy Association of Canada, B.C. Region, #303-1338 West Broadway, Vancouver, B.C. V6H 1H2. Completed applications must be received by the Association by July 21st.

**THE ENGINEERING INSTITUTE OF CANADA VANCOUVER ISLAND BRANCH BURSARY/SCHOLARSHIP** — Bursaries (or scholarships) are offered annually to students who have graduated from a high school located on Vancouver Island and who have completed the first year of a degree course in Engineering at an institution of higher education. Further information may be obtained from The Engineering Institute of Canada, Vancouver Island Branch, Scholarship Society, Box 5343, Station 'B', Victoria, B.C., V8R 6S4. Applications should be obtained from and submitted to the above address by July 31.

**CRYSTAL HENSON MEMORIAL BURSARY** — The Kootenay Society for Community Living Board of Governors offers a \$350 bursary annually to a student who has completed one year of post secondary study, who is pursuing studies related to the mentally handicapped and who intend to pursue a career working with the mentally handicapped. The bursary will be awarded to a student whose home residence is in the Kootenay area of B.C. and will be based on academic standing and financial need. Application forms may be obtained from: Kootenay Society for Community Living, 577 Baker Street, Nelson, B.C. V1L 4J1. Tel. (604) 352-1600. Fax. (604) 352-7748. Application Deadline: Sept. 30th.

**THE INDEPENDENT ORDER OF FORESTERS HIGH COURT OF BRITISH COLUMBIA AND ALASKA** — A series of bursaries, to a maximum of \$500 each are offered to members in good standing for not less than two years, or the dependent thereof, of the Independent Order of Foresters. Applicants must reside in the jurisdiction of the High Court of British Columbia and Alaska (Province of British Columbia; State of Alaska).

Requests for application forms must be made to: Mr. Hugh Lavery, High Secretary, High Court of British Columbia and Alaska, #8-630 Huxley Street, Victoria, B.C., V8Z 3X8.

Completed application forms must be returned to the High Secretary no later than August 31 of the current bursary year.

**THE INDEPENDENT ORDER OF ODD FELLOWS BURSARIES** — Eight bursaries of \$1000 each, provided by the Grand Lodge of British Columbia, I.O.O.F., the Grand Encampment, and the Rebekah.

The awards will be made by a joint committee consisting of two representatives from each of the Grand Bodies and joint bursary committee totalling 15 voting members. All applicants must have direct connection with one or more branches of the Order, through parents, grandparents, or close relatives. Special consideration will be given to applicants with financial need. Full details of the awards and application forms may be obtained from the Secretary of any Odd Fellows Lodge or Rebekah Lodge by May 1 so that they may be received by the Committee not later than May 15. All applications must be sponsored by an Odd Fellows Lodge, Rebekah Lodge, or Encampment. The above Committee will award annually an additional bursary of \$400 to a student in a recognized theological college of university status. This bursary will be known as the Dr. A.M. Sanford Memorial Bursary. Applicants will follow the same procedures as for all other I.O.O.F. bursaries, except the family connections with the I.O.O.F. will not be required.

**RUTH GARDNER AWARD** — The Juan de Fuca Hospital Foundation's Ruth Gardner Award is presented annually to one or more University of Victoria students to undertake a project at Juan de Fuca Hospitals. The award of up to \$5,000 is intended to provide students with practical or research experience concerning the provision of health care for the elderly in the clinical environment of Juan de Fuca Hospitals.

The award is available to graduate or undergraduate students in Psychology, Social Work, Nursing, Public Administration and Health Information Science. The project will be carried out under the supervision of a faculty adviser and a hospital adviser. Criteria used to determine the award winner(s) will include merits of the proposed project and financial need of the applicant.

Requests for application forms or for further information should be directed to:

Director  
Juan de Fuca Hospital Foundation  
1450 Hillside Avenue  
Victoria, B.C. V8T 2B7  
The deadline for applications is August 31.

**THE LISA HUUS MEMORIAL FUND** — A bursary in the amount of not less than \$1500 will be awarded annually to assist a severely disabled student to undertake or continue his or her postsecondary education at the University of Victoria. Applicants will be considered to have a severe disability provided there are two or more organ systems affected, e.g., muscular system or nervous system. Severe disabilities affecting only one organ system, but satisfying other criteria may be considered under special circumstances. Applications are obtainable from the Financial Aid Office, University of Victoria; or from Mrs. Annie Huus, c/o Development and Community Relations, Queen Alexandra Foundation for Children, 2400 Arbutus Road, Victoria, B.C., V8N 1V7 and must be submitted by no later than May 31.

**CINDY JAMES-HACK MEMORIAL BURSARY** — Up to \$1,000 will be awarded to a final year Health Sciences or Nursing student at U.B.C. and University of Victoria pursuing a career related to child care. To qualify, an applicant must be a full-time student going into the final year leading to a degree in Nursing. Students wishing to be considered for this bursary should apply by letter, supported by two references, setting out their career objectives and their financial circumstances. For further details and application contact L.Col. (Ret'd.) and Mrs. O.H. Hack, 1832 Cross Glen Court, Kelowna, B.C. V1V 1S4. Applications must be received no later than mid-September.

**LEONARD FOUNDATION AWARDS** — The Leonard Foundation allocates each year a number of awards for which students at the University of Victoria are eligible. The awards are primarily intended to assist children of the clergy to attend university. Application forms, available from the Student Financial Aid Services Office, should be forwarded to the Honorary Secretary of the Foundation, Canada Trust Co., 20 Eglinton Avenue West, Toronto, Ontario M4R 2E2 not later than March 15th of each year. Whenever possible these applications should be filed in February. Applicants will be advised by the end of June of the Committee's decisions.



**MAPLERIDGE ARTS' COUNCIL BURSARY** — A bursary of \$1,000 is available to a Fine Arts student entering year 2, 3 or 4 of a degree or diploma program. Applicants must have graduated from School District No. 42 senior secondary schools and demonstrate financial need. It is also open to a mature student wishing to further his or her Fine Arts Education, but the applicant must have resided in the Maple Ridge area for three years. For more information and application forms, please contact the Maple Ridge Arts' Council, Box 331, Maple Ridge, B.C. V2X 7G2. Application deadline is June 15.

**MARY MARCHI MEMORIAL BURSARY** — A bursary of \$350 is offered to students whose home residence is in the Kootenay area, who have completed one year, and are pursuing studies related to mentally handicapped, leading to a career in working with the mentally handicapped. Applications are available from: Mary Marchi Memorial Bursary, Kootenay Society for Community Living, 577 Baker Street, Nelson, B.C. V1L 4J1. Application for deadlines is September 30.

**PACIFIC COAST FISHERMEN'S MUTUAL MARINE INSURANCE COMPANY BURSARY** — Bursaries of \$600 are available to sons, daughters and legal wards of past or present members (or persons to whom a past or present member stood *In Loco Parentis*) of Pacific Coast Fishermen's Mutual Marine Insurance Company. Applicants must be enrolled full time at a post secondary educational institution. The application deadline is September 1. Application forms are available from the company at: Suite 200 - 4259 Canada Way, Burnaby, B.C. V5G 1H1. Tel: 438-4240. FAX: 438-5756.

**THE PISAPIO BURSARY PROGRAM** — A scholarship/bursary program to provide support to attend a recognized university for second, third, fourth and fifth year students and graduate students, whose homes are in Nelson, B.C.; within a fifty mile radius of Nelson, B.C.; or, in the East Kootenay regions. Full details and an application form may be requested from the Pisapio Scholarships Trust, 421 Baker Street, Nelson, B.C. V1L 4H7. Applications must be received no later than September 25.

**PROVINCE OF BRITISH COLUMBIA INTERNATIONAL YEAR OF DISABLED PERSONS BURSARIES** — In recognition of the International Year of Disabled Persons, this bursary was created to financially assist students with disabilities and will be awarded on merit and the basis of financial need. A bursary of \$500 will be available. To be eligible, the disabled student must be a resident of B.C., a Canadian Citizen or Permanent Resident. Application forms can be obtained by contacting the Grant Coordinator, B.C. Paraplegic Foundation, 780 S.W. Marine Drive, Vancouver, B.C. V6P 5Y7.

**THE ROBINSON AND BUCKLAND MEMORIAL BURSARY** — The Robinson and Buckland Memorial Bursary is sponsored by the Canadian National Institute for the Blind. Captain Merrill C. Robinson, blinded since 1917, was the Director of the Canadian National Institute for the Blind, B.C.-Yukon Division, from 1929 to 1964. His contribution towards the development of CNIB and services to the blind of B.C.-Yukon will long be remembered. Donald Channing Buckland, a graduate and distinguished faculty member of the University of British Columbia, was himself overtaken by blindness a few years before his death. Bursaries are issued a maximum of two times to applicants enrolled in a four year program and once to those enrolled in a two year program. The student must be registered with the CNIB. Application forms are available from the CNIB, and are to be submitted no later than August 15th, to the Executive Director, CNIB, 100-5055 Joyce Street, Vancouver, B.C. V5Z 6B2.

**THE ROYAL ARCH BURSARIES** — Several bursaries, up to \$500 each, have been established by the Royal Arch Masons of B.C. and Yukon to give assistance to children of members in good standing, or of deceased members, of Chapters of the Order of British Columbia and Yukon Territory, who need assistance to continue their education by attendance at a recognized Canadian university, the B.C. Institute of Technology, a regional or community college in B.C., or any other B.C.

technical or vocational school, including schools of nursing and forestry, including approximately equal proportions to students entering their first, second, and higher years. Applications must be made on the form to be obtained from the office of the Grand Chapter of Royal Arch Masons of British Columbia and the Yukon, Room 103, 1495 West 8th Avenue, Vancouver, B.C. V6H 1C9, or from secretaries of the Chapters in British Columbia and the Yukon, and must be completed and returned to the Grand Chapter office by July 15. The application must indicate clearly (a) the applicant's relationship to a member of the Royal Arch Masonic Chapter in B.C. or the Yukon, giving the name of the chapter and attaching a letter from the secretary of the chapter confirming this fact, and (b) the applicant's financial circumstances and that of his or her immediate family, including information as to the parent's income. Qualifying candidates will be required to have good academic standing. A transcript of the academic record must be submitted. However, consideration will be based primarily on the need of the applicant and secondarily on relative academic achievement.

**ROYAL CANADIAN NAVAL BENEVOLENT FUND** — Financial assistance in the form of interest free loans is available to members and former members of the Naval Forces of Canada and Canadian merchant Navy War Veterans, or their dependants for purposes of attending college, university or other educational and vocational institutions. Bursaries are also available from the Chief Petty Officer Andrew McQueen Jack Educational Trust Fund. Contact RCN Benevolent Fund, P.O. Box 505, Station "B", Ottawa, Ontario K1P 5P6 for details, supplying full details of service, age and marital status, to establish eligibility.

**ROYAL CANADIAN LEGION (PACIFIC COMMAND) BURSARIES** — The Legion (Pacific Command) offers annually a number of awards for students proceeding from high school to university, and some awards for students entering second, third and fourth year. Post-graduate study does not qualify. These bursaries are awarded on the basis of financial need. Preference is given to sons, daughters and grandchildren of deceased, disabled or other veterans, and ex-service personnel but applications from other worthy students are also considered. Further information may be obtained from Royal Canadian Legion, 3026 Arbutus Street, Vancouver, B.C. V6J 3Z2, or your local legion branch. Personal interviews are required. Incomplete applications are not considered or followed up. The deadline date for application is May 31.

**BARRY SULLIVAN, Q.C. MEMORIAL BURSARY FUND** — Awards in the amount of \$1,000 each will be awarded annually in each of one or more of three disciplines by the Barry Sullivan, Q.C. Memorial Bursary Fund Society in honor of the memory of Barry Sullivan who passed away March 21, 1988. Throughout his professional career and personal life, he contributed significantly to the three disciplines in which he held keen interest: law, social work as it relates to abuse of children, and education. His legendary endeavors included a report and recommendations on child abuse, the Sullivan Commission on Education and as a Counsel and Teacher in Criminal Law.

The funds will be awarded to students who display a combination of academic achievement, community involvement, dedication and imagination in their studies.

Applications must be submitted by October 31st to Mr. Thomas Russell, c/o Barry Sullivan Q.C. Memorial Bursary Fund Society, Suite 500 North Tower, 5811 Cooney Road, Richmond, B.C. V6X 3M1. Successful candidates will be notified prior to December 31. For further information, please call 276-2765.

**THE UNIVERSITY WOMEN'S CLUB OF THE COMOX VALLEY BURSARY** — A \$500 bursary is offered to a female graduate of a Comox Valley high school program who has completed at least one year of study in an accredited course at a Canadian university or college. Applications may be obtained from Jacqueline Kennett, Bursary Secretary, Box 296, Union Bay, B.C. V0R 3B0. Application deadline is July 1.

## SECTION 5

### GRANTS, LOANS AND WORK-STUDY

#### A. GRANTS FOR RURAL STUDENTS

**UNIVERSITY OF VICTORIA FACULTY RURAL STUDENT GRANTS** — A number of \$1,000 grants are awarded annually to

deserving students who are B.C. residents and who are registering at the University of Victoria for the first time. The awards will be based on demonstrated financial need, but in similar or identical cases, academic performance will be considered. A major determining factor will be the distance between the applicant's permanent home address and Victoria.



To be considered, applicants must complete the British Columbia Student Assistance Program Application Form, available from the Student Financial Aid Services Office at the University of Victoria, and must submit it by June 1.

#### B. LOANS FOR ELIGIBLE STUDENTS

**PROVINCE OF BRITISH COLUMBIA LOANS** — The Government of the Province of British Columbia provides loans to assist students who are residents of this province to commence or continue an acceptable program, while registered in at least 60% of a regular full-time program. Students must ensure they are aware of the most recent definitions of full-time attendance as government regulations are subject to change.

The Provincial Loan Plan is administered in conjunction with the Canada Student Loan Plan and the two plans are known as The British Columbia Student Assistance Program (B.C.S.A.P.). Similar plans are in effect in other Canadian Provinces for students who are not considered to be residents of British Columbia.

The purpose of B.C.S.A.P. is to assist students whose resources are insufficient to cover the cost of full-time studies. Assistance under the program is awarded when the financial resources available to students from parents, summer work or other sources are insufficient to meet estimated educational costs. Application forms for B.C.S.A.P. are available from any post-secondary institution in B.C. and should be submitted directly to the government in the self-addressed envelope by June 1st for the Winter Session and by March 1st for the Summer Session. Students who have not submitted their loan applications by August 1 can not expect to have their loans processed in time to meet fee payment deadlines and will not be exempt from paying any penalty charged for late payment or to be reinstated after having their registration cancelled.

**CANADA STUDENT LOANS PLAN** — The Government of Canada introduced this plan in 1964 to assist students who would be unable to pursue full time postsecondary studies without loan assistance.

Need for loan assistance is determined by Provincial Loan Authorities in accordance with administrative criteria established for use throughout Canada. In B.C., that authority is the British Columbia Student Loan Committee, Student Services Branch, 1106 Cook St., Victoria, B.C. V8V 3Z9.

A parental contribution table is an integral part of the criteria and is applied in all cases where the student has not established financial independence as defined under the plan. Students are expected to save a substantial amount of any income from summer employment.

**B.C. YOUTH FOUNDATION LOANS** — Students who do not qualify for Canada Student Loans because of high family income can inquire at the Student Financial Aid Services Office to determine their eligibility for assistance from this foundation. Loans are available to young persons up to 30 years of age who are residents of B.C. and who are able to obtain guarantors for the loans satisfactory to the Board of Directors of the B.C. Youth Foundation.

**P.E.O. SISTERHOOD EDUCATION LOAN FUND** — Women students in any year of a university course who do not qualify for Canada Student Loans, or who may find that their loan is not adequate for all their costs, may request a loan from this philanthropic organization at any time. Since the fund is administered from the U.S., prospective applicants should be prepared to wait up to three months before obtaining money. Two guarantors are required for each loan.

Fourth year and graduate students may be granted the maximum amount of loan, which is \$5,200, in one year. Undergraduates may apply for and be granted the maximum of \$5,200 for two or more years of study but may draw only \$2,600 of the loan in one academic year. First

year students must complete one term's work satisfactorily before making application. A loan may be considered for summer school.

Loans are made for periods of up to five years. Interest at the rate of 6% is to be paid annually, and the student is expected to begin repayment of the principal as soon as she is out of University and employed.

Students interested in finding out more about this loan fund are advised to make appointments with an adviser at Student Financial Aid Services.

#### THE UNIVERSITY OF VICTORIA EMERGENCY LOAN FUND —

The University of Victoria, through the Student Financial Aid Services Office, has a loan fund to assist students requiring financial assistance in emergency situations. The loans are interest free if paid prior to the due date, thereafter at an interest rate of 2% per month. This loan fund is not designed to meet general education costs faced by all students but rather specific emergency items such as expenses involved in travelling to visit sick relatives. As a general rule adult guarantors are required to cosign the loan application, but this may be waived if the student leaves a postdated cheque for the full amount as security, or if the student is waiting for government assistance which covers the loan. Students applying for an emergency loan must be interviewed by an adviser from Student Financial Aid Services and must sign a loan agreement.

#### C. WORK STUDY

The Work Study Program is a component of the British Columbia Student Assistance Program (B.C.S.A.P.). It is designed to provide on campus work experience for students requiring financial assistance. Students at the University of Victoria demonstrating financial need will be considered for the Work Study Program.

The objectives of the program are to:

- (i) Aid students in reducing indebtedness incurred while pursuing post secondary studies.
- (ii) Assist students in meeting additional costs that are not usually covered by the loan component of B.C.S.A.P.
- (iii) Assist in meeting shortfall of funds caused by the absence of expected students savings or expected parental/family contributions.
- (iv) Provide students with career related job experiences wherever possible.

The number of positions available to the University of Victoria are limited and therefore there is no guarantee of job placement for any student. Jobs under the program are administered according to internal policies and procedures established by the University of Victoria and may differ from policies established at other institutions.

Students wishing to be considered for a Work Study position must begin by completing an application any time after July 15th and submitting the form to the Student Financial Aid Services Office, Second Floor, University Centre. The money earned from a Work Study job may then be used either to reduce loan indebtedness, or to supplement a loan where additional need is demonstrated.

At the University of Victoria, a prospective Work Study applicant who has submitted an application will request an interview with an advisor of the Student Financial Aid Services Office. If the student is eligible and is prepared to fulfill the obligations incurred with the program, the applicant will be referred to the Student Employment Centre on Campus to seek an appropriate position. The final decision on hiring will be made by the project supervisor.

It is recommended that prospective applicants wait until they have worked out their timetable for the year before applying for a Work Study position.



# UNIVERSITY OF VICTORIA

## CHANCELLOR

The Hon. Robert G. Rogers, O.C., K.St.J., C.D., O.B.C., Hon. LL.D. (S. Fraser), Hon. D.Sc.M. (R.R.M.C.), Hon. LL.D. (U. of Vic.), Hon. LL.D. (Brit. Col.)

## PRESIDENT AND VICE CHANCELLOR

David F. Strong, B.Sc., M.S., Ph.D., F.R.S.C.

## VICE PRESIDENT ACADEMIC AND PROVOST

Samuel E. Scully, B.A., M.Litt., Ph.D.

## VICE PRESIDENT, FINANCE AND OPERATIONS

J. Donald Rowlatt, B.Com., Ph.D., Bursar

## BOARD OF GOVERNORS

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David F. Strong, B.Sc., M.S., Ph.D., F.R.S.C., President

### Members Appointed by the Lieutenant Governor in Council:

Mary-Wynne Ashford, M.D. Term expires December 1995

Laura Lynne Duncan, B.A. Term expires December 1995

David M. Ferne, B.Com., M.P.A., F.C.S.I. Term expires September 1996

Joan Frohn-Nielsen, Cert.Ed., B.A., Diplôme, M.Ed. Term expires January 1997.

Hugh A. Gordon, B.A., C.A., F.C.A. Term expires January 1996

Sandra J. Harper, B.A., LL.B. Term expires December 1997

Brian Lo. Term expires February 1998

Norma I. Mickelson, B.Ed., M.A., Ph.D. Term expires February 1998

### Members Elected by the Faculty Members:

Reginald H. Mitchell, B.A., M.A., Ph.D. Term expires 31 May 1996

Larry D. Yore, B.S., M.A., Ph.D. Term expires 31 May 1996

### Members Elected by Student Association:

Joel Freedman. Term expires 30 April 1996

Meghan Gaudet, B.A. Term expires 30 April 1996

### Member Elected by Employees:

Mary Anne Teo, B.Sc. Term expires 31 May 1996

### Secretary:

Sheila Sheldon Collyer, B.A., University Secretary

## SENATE

### Ex Officio Members:

The Hon. Robert G. Rogers, O.C., K.St.J., C.D., O.B.C., Hon. LL.D. (S. Fraser), Hon. D.Sc.M. (R.R.M.C.), Hon. LL.D. (U. of Vic.), Hon. LL.D. (Brit. Col.), Chancellor

David F. Strong, B.Sc., M.S., Ph.D., F.R.S.C., President (Chair)

Samuel E. Scully, B.A., M.Litt., Ph.D., Vice President Academic and Provost

G.R. Ian MacPherson, B.A., M.A., Ph.D., Dean of Humanities, Faculty of Arts and Science

Louis D. Costa, A.B., M.A., Ph.D., Dean of Social Science, Faculty of Arts and Science

John T. Weaver, B.Sc., M.Sc., Ph.D., Dean of Science, Faculty of Arts and Science

Beverly A. Timmons, B.A., M.S., D.Ed., Dean, Faculty of Education

James W. Provan, B.Sc., M.Sc., Ph.D., Dean, Faculty of Engineering

Anthony Welch, B.A., M.A., Ph.D., Dean, Faculty of Fine Arts

Gordana Lazarevich, B.Sc., M.Sc., Ph.D., Dean, Faculty of Graduate Studies

James C. McDavid, B.A., M.A., M.A., Ph.D., Dean, Faculty of Human and Social Development

David S. Cohen, B.Sc., LL.B., LL.M., Dean, Faculty of Law

W. Michael Brooke, B.A., LL.B., M.A., Ph.D., Dean, Continuing Studies

Margaret C. Swanson, B.A., B.L.S., University Librarian

### Elected by the Individual Faculties:

#### Arts and Science:

Keith R. Dixon, B.A., Ph.D., F.C.I.C. Term expires June 30, 1995

Clare K. Porac, B.A., M.A., Ph.D. Term expires June 30, 1996

#### Education:

John O. Anderson, B.Sc., B.Ed., M.Ed., Ph.D. Term expires June 30, 1996

Peter J. Murphy, B.A., B.Ed., M.Ed., Ph.D. Term expires June 30, 1995

#### Engineering:

Sadik Dost, B.Sc., M.Sc., Ph.D., P.Eng. Term expires June 30, 1996

D. Michael Miller, B.Sc., M.Sc., Ph.D. Term expires June 30, 1995

#### Fine Arts:

Lynda Gammon, B.A., M.F.A. Term expires June 30, 1995

#### Graduate Studies:

Marie L. Campbell, B.A., M.A., Ph.D. Term expires June 30, 1996

John Money, B.A., M.A., Ph.D. Term expires June 30, 1995

#### Human and Social Development:

James J. McRae, B.A., M.A., Ph.D. Term expires June 30, 1997

Ralph W. Huenemann, B.A., M.A., Ph.D. Term expires June 30, 1995

#### Law:

Hamar Foster, B.A., M.A., M.Jur., LL.B., F.R.Hist.S. Term expires June 30, 1995

Terry J. Wuester, B.A., M.A., J.D., LL.M. Term expires June 30, 1996

### Members Elected by the Faculty Members:

Leslie Brown, B.S.W., M.P.A. Term expires June 30, 1996

Thomas A. Cleary, B.A., M.A., Ph.D. Term expires June 30, 1998

J. Isobel Dawson, B.Sc.N., M.Sc.N., M.A., Ph.D. Term expires June 30, 1998

Genevieve Eden, B.A., M.I.R., Ph.D. Term expires June 30, 1997

Barry W. Glickman, B.Sc., M.Sc., Ph.D. Term expires June 30, 1998

Reginald H. Mitchell, B.A., M.A., Ph.D. Term expires June 30, 1997

Alison Preece, B.A., M.A., Ph.D. Term expires June 30, 1996

Stephen A. C. Scobie, M.A., Ph.D. Term expires June 30, 1997

Stanislaw S. Stuchly, B.Sc., M.Sc., Ph.D., F.I.E.E.E., P.Eng. Term expires June 30, 1996

T. Rennie Warburton, B.A., Ph.D. Term expires June 30, 1997



**Members Elected by the Student Association:****Full Time Students** (Terms expire April 30, 1995)

|                              |                             |
|------------------------------|-----------------------------|
| Neil Barman                  | Timothy S. Macneil, B.Math. |
| Christopher G. Devlin, B.A.  | Jarek Oleszczuk             |
| Jean-Luc J. Forest           | Philip S. Olson             |
| Meghan Gaudet                | Sudhakar Rao                |
| Pamela C. Grant              | David R. Wheatcroft         |
| Gwenda Laughland, B.A., M.A. | Bridget Willbond            |

**Part Time Student:**

Vivian Muir, B.A., M.Sc. Term expires April 30, 1998

**Members Elected by the Convocation**

(Terms expire December 31, 1996)

Olivia R. Barr, B.A., Dip.Ed.

Paula DeBeck, B.A.

Elizabeth M. Hanan, LL.B.

Mark Bridge, LL.B., B.Sc., LL.M.

**Member Elected by the Professional Librarians:**

Betty J. Gibb, B.A., M.L.S. Term expires June 30, 1997

**Members Appointed by the Lieutenant Governor In Council:**

(Terms expire March 31, 1996)

Shirley Holloway, M.Sc., Ph.D.

Robert W. Nixon, B.S., B.S.F.

**(Secretary) Registrar:**

Sheila Sheldon Collyer, B.A., University Secretary

**FOUNDATION FOR THE UNIVERSITY OF VICTORIA****Members of the Board:**

Mary-Wynne Ashford, M.D. Term expires August 1996

David M. Ferne, B.Com., M.P.A., F.C.S.I. Term expires August 1996

Dan Gallant. Term expires February 1998

Lynne Henderson. Term expires February 1998

Appointment pending

**Officers:**

President: David F. Strong, B.Sc., M.S., Ph.D., F.R.S.C. (ex officio)

Treasurer: Robert M. Worth, B.A., C.A. (ex officio)

**Secretary:**

Cecilia Freeman-Ward, B.A., Dip.Ed., M.P.A.

**UNIVERSITY OF VICTORIA FOUNDATION****Members of the Board:**

Arthur R. Steele (Chairman). Term expires March 31, 1995

Alan G. Aldous, B.Com. Term expires March 31, 1995

Ronald G. Campion, C.A. Term expires July 3, 1997

Carole Didier. Term expires December 31, 1995

David M. Ferne, B.Com., M.P.A., F.C.S.I. Term expires August 20, 1996

Jane Heffelfinger, B.A. Term expires January, 1998

Patricia A. Johnson, B.A., LL.B., LL.M. Term expires December 31, 1996

M. Eugene Nesmith. Term expires December 31, 1997

Douglas S. Prest. Term expires December 31, 1996

Paul Siluch, B.Sc.E.E. Term expires November 20, 1997

David F. Strong, B.Sc., M.S., Ph.D., F.R.S.C. (ex officio)

J. Donald Rowlett, B.Com., Ph.D. (ex officio)

Robert M. Worth, B.A., C.A. (ex officio) (Treasurer)

**Secretary:**

Cecilia Freeman-Ward, B.A., Dip.Ed., M.P.A.

**KEY CONTACTS AT THE UNIVERSITY OF VICTORIA****EXECUTIVE AND ADMINISTRATIVE OFFICERS**

|   | Fax      | Telephone |
|---|----------|-----------|
| President: Dr. David F. Strong .....          | 721-8654 | 721-7002  |
| Chancellor: The Hon. Robert G. Rogers .....   | 721-6253 |           |
| Chair, Board of Governors:                    |          |           |
| Ms. Sandra J. Harper .....                    | 721-6223 | 721-8100  |
| University Secretary and                      |          |           |
| Secretary, Board of Governors and Senate:     |          |           |
| Ms. Sheila Sheldon Collyer .....              | 721-6223 | 721-8100  |
| Vice-President (Academic) and Provost:        |          |           |
| Dr. Samuel E. Scully .....                    | 721-7216 | 721-7010  |
| Vice-President (Finance and Operations):      |          |           |
| Dr. J. Donald Rowlett .....                   | 721-8654 | 721-7018  |
| Associate Vice-President (Academic):          |          |           |
| Dr. John A. Schofield .....                   | 721-7216 | 721-7012  |
| Associate Vice-President (Research):          |          |           |
| Dr. Alexander McAuley .....                   | 721-8960 | 721-7973  |
| Administrative Registrar:                     |          |           |
| Mr. D. Cledwyn Thomas .....                   | 721-6225 | 721-8106  |
| Executive Assistant to the President and      |          |           |
| Director, Institutional Analysis:             |          |           |
| Mr. James E. Currie (to April 15, 1995) ..... | 721-7004 |           |
| Assistant to the President and Director,      |          |           |
| Equity Issues: Ms. Sheila M. Devine .....     | 721-8570 | 721-8486  |
| Special Assistant to the President            |          |           |
| Alumni Affairs: Mr. Nels Granewall .....      | 721-7005 |           |
| Administrative Assistant to the President:    |          |           |
| Mrs. Virginia Cummings .....                  | 721-8654 | 721-7002  |

Fax Telephone

|   |          |          |
|---|----------|----------|
| Secretary, The University Presidents'           |          |          |
| Council of B.C.: Mr. Dean S. Goard .....        | 721-7985 |          |
| Advisers to the Vice-President Academic:        |          |          |
| (Faculty Women) Prof. Judith A. Terry .....     | 721-7216 | 721-6143 |
| (Aboriginal Liaison) Mr. William A. White ..... | 721-7216 | 721-6326 |
| Dean of Continuing Studies:                     |          |          |
| Dr. W. Michael Brooke .....                     | 721-8774 | 721-8456 |
| University Librarian:                           |          |          |
| Ms. Marnie Swanson .....                        | 721-8215 | 721-8211 |

**ACADEMIC ADVISING**

|   |          |          |
|---|----------|----------|
| Faculty of Arts and Science Advising Centre:    |          |          |
| Dr. Frank P. Robinson, Director .....           | 721-7059 | 721-7566 |
| Faculty of Business .....                       | 721-6067 | 721-6056 |
| Faculty of Education Advising Centre:           |          |          |
| Mr. Christopher W. Moss, Director .....         | 721-7767 | 721-7877 |
| Continuing Studies in Education:                |          |          |
| Dr. Robert D. Bell, Director .....              | 721-7767 | 721-7874 |
| Faculty of Engineering Coop Program:            |          |          |
| Mr. Barry W. Brooks, Manager .....              |          | 721-8625 |
| Graduate Advising: Refer to particular academic |          |          |
| department                                      |          |          |
| Faculty of Law: Mr. Richard A. Rennie,          |          |          |
| Assistant to the Dean .....                     | 477-7413 | 721-8150 |

**UNIVERSITY SERVICES**

|                                     |          |          |
|-------------------------------------|----------|----------|
| Accounting Services:                |          |          |
| Mr. Robert M. Worth, Director ..... | 721-6221 | 721-7028 |
| Admission Services:                 |          |          |
| Mr. Kevin D. Paul, Director .....   |          | 721-8119 |



|  | Fax      | Telephone |
|--|----------|-----------|
| Anti-harassment Officer:<br>Ms. Susan Shaw .....   | 472-4114 | 721-8488  |
| University Archivist:<br>Mr. Christopher G. Petter .....   | 721-8215 | 721-8257  |
| Art Museum, Gallery and Auditorium:<br>Prof. Martin J. Segger, Director .....  |          | 721-8298  |
| Athletics and Recreational Services:<br>Mr. Wayne P. MacDonald, Manager .....  | 721-8956 | 721-8409  |
| Bookstore: Mrs. Gertraude Martin, Manager .....  | 721-8553 | 721-8310  |
| Child Care Services:<br>Ms. Lucille M. MacKay, Manager .....   |          | 721-8500  |
| Computing and Systems Services:<br>Mr. Herbert R. Widdifield, Director .....   | 721-8778 | 721-8727  |
| Conference Management:<br>Ms. Mary O'Rourke, Program Director .....  | 721-8774 | 721-8465  |
| Cooperative Education Programs:<br>Dr. Graham R. Branton, Director .....   | 721-8996 | 721-7628  |
| Counselling Services:<br>Mary Jane McLachlan, Coordinator .....  |          | 721-8341  |
| Development and External Relations:<br>Ms. Margaret L. Beckel, Executive Director .....                                | 721-8961 | 721-7014  |
| Facilities Management:<br>Mr. Gerald A. Robson, Director .....   | 721-8999 | 721-7592  |
| Graduate Admissions and Records:<br>Ms. Ann Nightingale, Director .....  | 721-6225 | 721-8733  |
| Graphics, Photography and Television Services:<br>Mr. Michael Keating, Manager .....                                   | 721-8778 | 721-8280  |
| Health Services:<br>Dr. John E. Petersen, Director .....   | 721-6224 | 721-8492  |
| Housing, Food and Conference Services:<br>Mr. Gavin Quiney, General Manager .....                                      | 721-8930 | 721-8395  |
| Human Resources:<br>Mr. Peter J. van der Leeden, Director .....  | 721-8094 | 721-8032  |
| Innovation and Development Corporation:<br>Mr. Harry K. Davis, President and CEO .....                                 | 721-6497 | 721-6500  |
| Internal Audit: Mr. Brian H. Atwell, Director .....  |          | 721-7039  |
| Language Centre:<br>Dr. Peter G. Liddell, Director .....   | 721-8778 | 721-8295  |
| Learning and Teaching Centre:<br>Dr. Andrew Farquharson, Director .....  | 721-6494 | 721-8572  |
| Public Relations and Information Services:<br>Mr. Bruce Kilpatrick .....   | 721-8955 | 721-7638  |
| Purchasing Services:<br>Mr. George C. Smith, Manager .....   | 721-8327 | 721-8326  |
| Records Services:<br>Mr. David A. C. Glen, Director .....  | 721-6225 | 721-8131  |
| Security Services:<br>Mr. Hunter McDonald, Director .....  |          | 721-7600  |
| Special Student Programs (International<br>and Disabled Student Liaison):<br>Ms. Patricia M. Brooke, Coordinator ..... |          | 721-8743  |
| Student and Ancillary Services:<br>Mr. James F. Griffith, Director .....   |          | 721-8022  |
| Student Employment Centre:<br>Ms. Jennifer Margison, Manager .....   |          | 721-8421  |
| Student Financial Aid Services:<br>Appointment Pending .....   | 721-8757 | 721-8423  |
| Telephone and Technical Services:<br>Mr. Herbert D. Fox, Manager .....   | 721-8778 | 721-7682  |
| University of Victoria Students' Society (UVSS):<br>Ms. Tina Walker, Chairperson (1994/95) .....                       | 721-8728 | 721-8370  |
| Graduate Students' Society:<br>Jeremy Mannall-Fretwell, President (1994/95) .....                                      |          | 721-6376  |

|   | Fax | Telephone |
|---|-----|-----------|
| Student Society Ombudsperson:<br>Ms. Kathleen Beattie ..... |     | 721-8357  |

## DEANS OF FACULTIES

|   |          |          |
|---|----------|----------|
| Arts and Science: Dr. John T. Weaver .....                  | 721-7062 | 721-7063 |
| Division of Humanities:<br>Dr. G.R. Ian MacPherson .....    | 721-7059 | 721-7063 |
| Division of Science:<br>Dr. John T. Weaver .....            | 721-7059 | 721-7062 |
| Division of Social Sciences:<br>Dr. Louis D. Costa .....    | 721-7059 | 721-7064 |
| Business: Dr. David A. Boag, Director .....                 | 721-6067 | 721-6060 |
| Education: Dr. Beverly A. Timmons .....                     | 721-7767 | 721-7757 |
| Engineering: Dr. James W. Provan .....                      | 721-8676 | 721-8611 |
| Fine Arts: Dr. S. Anthony Welch .....                       | 721-7748 | 721-7755 |
| Graduate Studies: Dr. Gordana Lazarevich .....              | 721-8957 | 721-7970 |
| Human and Social Development:<br>Dr. James C. McDavid ..... | 721-7067 | 721-8050 |
| Law: Prof. David S. Cohen .....                             | 477-7413 | 721-8147 |

## DEPARTMENT CHAIRS AND DIRECTORS OF SCHOOLS/PROGRAMS

|  |          |          |
|--|----------|----------|
| Anthropology: Dr. David S. Moyer .....   | 721-6215 | 721-7056 |
| Arts in Education: Dr. Betty Hanley .....  | 721-6589 | 721-7836 |
| Biochemistry and Microbiology:<br>Appointment pending .....                      | 721-8855 | 721-7077 |
| Biology: Dr. Patrick T. Gregory .....  | 721-7120 | 721-7091 |
| Chemistry: Dr. Terence E. Gough .....  | 721-7147 | 721-7150 |
| Child and Youth Care: Dr. Valerie Kuehne .....                                   | 721-7218 | 721-7979 |
| Classics: Dr. John P. Oleson .....   |          | 721-8514 |
| Communication and Social Foundations<br>in Education: Dr. Vernon J. Storey ..... |          | 721-7802 |
| Computer Science: Dr. D. Michael Miller .....                                    | 721-7292 | 721-7220 |
| Earth and Ocean Sciences:<br>Dr. Christopher R. Barnes .....                     | 721-6200 | 721-6120 |
| Economics: Dr. Malcolm Rutherford .....  | 721-6214 | 721-8531 |
| Electrical and Computer Engineering:<br>Dr. Stanislaw S. Stuchly .....           | 721-6052 | 721-8613 |
| English: Dr. Evelyn M. Copley .....  |          | 721-7235 |
| Environmental Studies Program:<br>Dr. Paul R. West .....                         |          | 721-7353 |
| French Language and Literature:<br>Dr. Barrington F. Beardsmore .....            |          | 721-7364 |
| Geography: Dr. Michael Edgell .....  | 721-6216 | 721-7325 |
| Germanic Studies: Dr. Johannes Maczewski .....                                   |          | 721-7316 |
| Health Information Science:<br>Dr. Paul D. Fisher .....                          | 721-1457 | 721-8575 |
| Hispanic and Italian Studies:<br>Dr. Elena Rossi .....                           |          | 721-7411 |
| History: W. Ted Wooley .....   | 721-8772 | 721-7381 |
| History in Art: Dr. Carol Gibson-Wood .....                                      |          | 721-7940 |
| Linguistics: Dr. Joseph F. Kess .....  | 721-7423 | 721-7422 |
| Mathematics and Statistics:<br>Dr. William E. Pfaffenberger .....                | 721-8962 | 721-7436 |
| Mechanical Engineering:<br>Dr. Behrouz Tabarok .....                             | 721-6051 | 721-8900 |
| Medieval Studies: Dr. John L. Osborne .....                                      |          | 721-6302 |
| Music: Prof. Michael M. Longton .....  | 721-6597 | 721-7903 |
| Nursing: Dr. Anita E. Molzahn .....  | 721-6231 | 721-7955 |



## Fax Telephone

|   |                         |
|---|-------------------------|
| Pacific and Asian Studies:                                  |                         |
| Dr. Joe B. Moore .....                                      | 721-7219 ..... 721-7480 |
| Philosophy: Dr. Jeffrey E. Foss .....                       | 721-7513                |
| Physical Education: Dr. David Docherty .....                | 721-8375                |
| Physics and Astronomy:                                      |                         |
| Dr. John M. Dewey (to 30 June 1995) .....                   | 721-7715 ..... 721-7698 |
| Political Science:  |                         |
| Dr. R.B.J. Walker (Acting) .....                            | 721-7485 ..... 721-7499 |
| Professional Studies in Education:                          |                         |
| Dr. H. David Turkington .....                               | 721-7866                |
| Psychological Foundations in Education:                     |                         |
| Dr. John O. Anderson .....                                  | 721-6190 ..... 721-7799 |
| Psychology: Dr. Richard B. May .....                        | 721-8929 ..... 721-7522 |
| Public Administration: Dr. James J. McRae .....             | 721-8849 ..... 721-8054 |
| Slavonic Studies: Dr. Nicholas V. Galichenko .....          | 721-7506 ..... 721-7503 |
| Social and Natural Sciences in Education:                   |                         |
| Dr. Irvin K. Burbank .....                                  | 721-7769                |
| Social Work: Prof. Barbara Whittington .....                | 721-6228 ..... 721-8333 |
| Sociology: Dr. Pam Duncan<br>(Acting to 30 June 1995) ..... | 721-6217 ..... 721-7575 |
| Theatre: Dr. Giles Hogya .....                              | 721-7991                |
| Visual Arts: Prof. Robert Youds .....                       | 721-8010                |
| Women's Studies: Dr. Jennifer Waelti-Walters .....          | 721-6157                |
| Writing: Prof. Lawrence Russell .....                       | 721-7306                |

## Fax Telephone

## DIRECTORS OF CENTRES AND INSTITUTES

|  |                         |
|--|-------------------------|
| Centre for Advanced Materials and Related<br>Technology (CAMTEC): Dr. Sadik Dost<br>(c/o Mechanical Engineering) ..... | 721-6631/8898           |
| Centre on Aging (COA): Dr. Neena L. Chappell .....   | 721-6369                |
| Centre for Asia Pacific Initiatives (CAPI):<br>Prof. William A.W. Neilson .....  | 721-3107 ..... 721-7022 |
| Centre for Earth and Ocean Research (CEOR):<br>Dr. Christopher R. Barnes .....   | 721-6200 ..... 721-8848 |
| Centre for Forest Biology: Dr. John N. Owens .....   | 721-7119                |
| Humanities Centre:<br>Dean of Humanities (see above) .....   | 721-7059 ..... 721-7063 |
| Centre for Studies in Religion and<br>Society (CSRS): Dr. Harold G. Coward .....                                       | 721-6234 ..... 721-6325 |
| Centre for Sustainable Regional<br>Development (CSR D):<br>Dr. Stephen C. Loneragan .....                              | 721-8782 ..... 721-7339 |
| Institute for Dispute Resolution:<br>Prof. Andrew J. Pirie .....   | 721-8777                |
| Institute for Integrated Energy Systems (IESVIC)<br>Dr. David Scott .....  | 721-8931                |
| Laboratory for Automation, Communication,<br>and Information Systems Research (LACIR):<br>R. Nigel Horspool .....      | 721-6632 ..... 721-7297 |

## EMERITUS FACULTY AND STAFF AND HONORARY DEGREE RECIPIENTS

## PRESIDENT EMERITUS (1990)

Howard E. Petch, B.Sc., M.Sc., Ph.D., D.Sc., LL.D., F.R.S.C.

## UNIVERSITY LIBRARIAN EMERITUS (1988)

Dean W. Halliwell, B.L.S., M.A.

## EMERITUS FACULTY, 1994-95

The Honourable Ronald I. Cheffins, Q.C., B.A., LL.B., LL.M., of the  
Bar of British Columbia, Professor, Public Administration, and  
Professor, Political Science (1995)

George Corwin, B.S., M.A., D.M.A., Professor, Music (1995)

John M. Dewey, B.Sc., Ph.D., Professor, Physics (1995)

Alan R. Drengson, B.A., M.A., Ph.D., Associate Professor, Philosophy  
(1995)

Arthur R. Fontaine, B.Sc., D.Phil., Professor, Biology (1994)

George H. Forbes, B.A., M.A., Phil.M., Assistant Professor, English  
(1994) (deceased)

James Hendrickson, B.A., B.Ed., M.A., Ph.D., Associate Professor,  
History (1994)

Geoffrey S. Hodder, B.Ed., M.A., Associate Professor, Arts in Education  
(1995)

Ronald A. Hoppe, B.A., M.A., Ph.D., Professor, Psychology (1994)

George O. Mackie, B.A., M.A., D.Phil., Professor, Biology (1994)

Jessie Mantle, B.N., M.S.N., Professor, Nursing (1994)

Alastair T. Matheson, B.A., M.Sc., Ph.D., F.R.S.C., Professor, Biochem-  
istry and Microbiology (1995)

John E. McInerney, B.Sc., M.Sc., Ph.D., Associate Professor, Biology  
(1995)

Donald H. Mitchell, B.A., B.Comm., M.A., Ph.D., Professor, Anthro-  
pology (1995)

Gerald E. Moreau, B.A., M.A., D. de l'Univ., Member of the Order of  
Canada, French Language and Literature (1994)

Irene M. Pieper, B.A., M.A., Associate Professor, Theatre (1995)

John J. Sheppy, B.A., M.Ed., Associate Professor, Social and Natural  
Sciences in Education (1994)

Ronald E. Tinney, B.A., Ph.D., Associate Professor, Psychological  
Foundations in Education (1994)

## HONORARY DEGREE RECIPIENTS, 1994

His Royal Highness The Prince Edward, CVO  
Hon. LL.D., August 1994

Roger Bannister, Hon. LL.D., August 1994

Patricia Martin Bates, Hon. D.F.A., May 1994

Gretta Taylor Chambers, Hon. LL.D., May 1994

Gwladys Violet Downes, Hon. D.Litt., November 1994

Ethel Margaret Futers Fulton, Hon. D.Ed., May 1994

Richard Marvin Hansen, Hon. LL.D., August 1994

Siti Hasmah Binti Haji Mohd Ali, Hon. LL.D., August 1994

Barbara Kahan, Hon. LL.D., May 1994

David Johnston, Hon. LL.D., August 1994

Silken Suzette Laumann, Hon. LL.D., August 1994

John Michael Landy, Hon. LL.D., August 1994

Abraham Ordia, Hon. LL.D., August 1994

J. Douglas Peden, Hon. LL.D., August 1994

Pepe Romero, Hon. D.Mus., May 1994

Ravi Shankar, Hon. D.Mus., August 1994

Wilfred Cantwell Smith, Hon. D.Litt., November 1994

Thomas Richard Edmund Southwood, Hon. D.Sc., November 1994

Richard Edward Taylor, Hon. D.Sc., May 1994



# STATISTICS

## ENROLLMENT 1994-95 AS OF NOVEMBER, 1994

(Figures for 1993-94 are in brackets)

### Faculty of Arts and Science - Full Time\*

|                               |      |        |
|-------------------------------|------|--------|
| First Year .....              | 1108 | (931)  |
| Second Year .....             | 1219 | (1178) |
| Third Year .....              | 1425 | (1364) |
| Fourth Year .....             | 1342 | (1340) |
| Unclassified as to year ..... | 74   | (50)   |
| Total in Faculty .....        | 5168 | (4863) |

### Faculty of Education - Full Time\*

|                               |     |       |
|-------------------------------|-----|-------|
| First Year .....              | —   | (—)   |
| Second Year .....             | 80  | (92)  |
| Third Year .....              | 190 | (242) |
| Fourth Year .....             | 268 | (323) |
| Fifth Year .....              | 273 | (274) |
| Sixth Year .....              | 26  | (21)  |
| Unclassified as to year ..... | 24  | (25)  |
| Total in Faculty .....        | 861 | (977) |

### Faculty of Engineering - Full Time\*

|                               |     |       |
|-------------------------------|-----|-------|
| First Year .....              | 124 | (121) |
| Second Year .....             | 148 | (176) |
| Third Year .....              | 308 | (268) |
| Fourth Year .....             | 192 | (169) |
| Unclassified as to year ..... | 8   | (6)   |
| Total in Faculty .....        | 780 | (740) |

### Faculty of Fine Arts - Full Time\*

|                               |     |       |
|-------------------------------|-----|-------|
| First Year .....              | 159 | (167) |
| Second Year .....             | 170 | (168) |
| Third Year .....              | 181 | (180) |
| Fourth Year .....             | 168 | (182) |
| Unclassified as to year ..... | 1   | (6)   |
| Total in Faculty .....        | 679 | (703) |

### Faculty of Human and Social Development - Full Time\*

|                               |     |       |
|-------------------------------|-----|-------|
| First Year .....              | —   | (8)   |
| Second Year .....             | 47  | (34)  |
| Third Year .....              | 117 | (201) |
| Fourth Year .....             | 137 | (128) |
| Unclassified as to year ..... | 3   | (6)   |
| Total in Faculty .....        | 304 | (377) |

### Faculty of Law - Full Time\*

|                                      |        |          |
|--------------------------------------|--------|----------|
| First Year .....                     | 103    | (99)     |
| Second Year .....                    | 100    | (105)    |
| Third Year .....                     | 93     | (91)     |
| Unclassified as to year .....        | 2      | (2)      |
| Total in Faculty .....               | 298    | (297)    |
| Total full time undergraduates*      | 8,090  | (7,957)  |
| Total part time undergraduates ..... | 5,156  | (5,327)  |
| Total Undergraduates .....           | 13,246 | (13,284) |

### Faculty of Graduate Studies

|                        |       |         |
|------------------------|-------|---------|
| Full time .....        | 1,605 | (1,644) |
| Part time .....        | 332   | (230)   |
| Total in Faculty ..... | 1,937 | (1,874) |

**Grand Total** ..... 15,183 (15,158)

## FULL TIME STUDENTS OF NON-B.C. ORIGIN 1994-95

Determined by location of previous educational institution attended.  
(Figures for 1993-94 are in brackets.)

|                             |       |         |
|-----------------------------|-------|---------|
| Alberta .....               | 339   | (385)   |
| Saskatchewan .....          | 45    | (55)    |
| Manitoba .....              | 31    | (36)    |
| Ontario .....               | 239   | (251)   |
| Quebec .....                | 27    | (27)    |
| New Brunswick .....         | 4     | (3)     |
| Nova Scotia .....           | 12    | (14)    |
| Prince Edward Island .....  | 1     | (2)     |
| Newfoundland .....          | 3     | (3)     |
| Northwest Territories ..... | 5     | (8)     |
| Yukon .....                 | 4     | (12)    |
| Other Countries .....       | 517   | (525)   |
| Total .....                 | 1,227 | (1,321) |

## DEGREES CONFERRED 1994

B.A. — 1021; B.Comm. — 61; B.Ed. — 380; B.Eng. — 80; B.F.A. — 84; B.Mus. — 41; B.Sc. — 461; B.S.N. — 177; B.S.W. — 90; LL.B. — 107; M.A. — 104; M.A.Sc. — 12; M.B.A. — 24; M.Ed. — 114; M.Eng. — 1; M.F.A. — 8; M.Mus. — 6; M.N. — 2; M.P.A. — 24; M.Sc. — 43; M.S.W. — 6; Ph.D. — 39.  
TOTAL — 2885.

## DEGREES GRANTED AT THE COLLEGES SPRING 1994

| Cariboo College   |    | Okanagan College |    |
|-------------------|----|------------------|----|
| B.S.N.            | 22 | B.Ed.            | 28 |
| B.S.W.            | 20 | B.F.A.           | 11 |
| Malaspina College |    | B.S.N.           | 27 |
| B.A.              | 35 | B.S.W.           | 21 |
| B.Ed.             | 45 |                  |    |

## PERMANENT BUILDINGS ON THE UNIVERSITY CAMPUS

|  |  |
|--|--|
| Student Union Building (1962);<br>addition (1976)  | Saunders Building (1974)   |
| Clearihue Building (1962);<br>Classroom-Office Extension<br>(1971); Third Wing (1976);<br>Fourth Wing (1979) | McKinnon Building (1975)   |
| Cornett Building (1966);<br>addition (1971)  | University Centre (1978);<br>addition (1989)                     |
| Elliott Building (1963);<br>Lecture Wing (1964)  | Gordon Head Residences (1978)                                    |
| Craigdarroch Residences<br>(1964); additions (1966,<br>1967, 1973, 1981)                                     | Visual Arts Building<br>(1979 interim) (1993)                    |
| Campus Services Building<br>(1965); addition (1986)  | Begbie Building (1980)   |
| MacLaurin Building (1966)  | Phoenix Building (1981)  |
| Music Wing (1978)  | McGill Residences (1981)   |
| McPherson Library (1964);<br>addition (1973)   | Faculty Club (1982)  |
| Centennial Stadium (1967)  | Interfaith Chapel (1985)   |
| Sedgewick Building (1968);<br>additions (1969, 1970)   | Petch Building (1985);<br>Engineering Office Wing (1990)         |
| Cadboro Commons/<br>Craigdarroch Office Building<br>(1969)   | Engineering Lab Wing (1995)                                      |
| Lansdowne Residences (1969)  | George and Ida Halpern<br>Centre for Graduate<br>Students (1991) |
| Cunningham Building (1971)   | Fine Arts Building (1992)  |
|  | Human and Social Development<br>Building (1992)                  |
|  | Child Care Complex (Day Care)<br>(1993)                          |
|  | David & Dorothy Lam Family<br>Student Housing Complex<br>(1994)  |
|  | Commonwealth Village (1994)                                      |

\* Undergraduates registered in 12 units or more.

Source: University of Victoria Registration  
Statistics 1993-94 as of November, 1993



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## UNIVERSITY MAP DIRECTORY

| DEPARTMENT  | BUILDING  | LOCATION | DEPARTMENT   | BUILDING   | LOCATION |
|---|---|----------|--|--|----------|
| Aboriginal Liaison Office                             | Sedgewick "C" Wing                                      | B-3      | Human & Social Development (Dean's Office)               | Human & Social Development                         | B-3      |
| Accounting Services                                   | University Centre                                       | C-3      | Humanities Centre  | Clearihue  | C-3      |
| Administration  | Sedgewick "A" Wing                                      | B-3      | Human Resources  | Sedgewick "B" Wing                                 | B-3      |
| Administration Stores                                 | Campus Services   | C-2      | Innovation & Development Corporation                     | R Building   | C-1      |
| Administrative Registrar                              | University Centre                                       | C-3      | Institute for Dispute Resolution                         | Begbie   | A-3      |
| Admission Services (Undergraduate)                    | University Centre                                       | C-3      | Institute for Integrated Energy Systems                  | L Building   | C-2      |
| Admission Services (Graduate)                         | University Centre                                       | C-3      | Institutional Analysis                                   | Sedgewick "B" Wing                                 | B-3      |
| Admission Services (Law)                              | Begbie  | A-3      | LACIR (B.C. Advanced Systems Institute)                  | Engineering Office Wing                            | C-4      |
| Advising Centre (Arts & Science)                      | Clearihue   | C-3      | Lam Auditorium   | MacLaurin Music Wing                               | B-4      |
| Advising Centre (Education)                           | MacLaurin   | B-4      | Language Centre  | Clearihue  | C-3      |
| Alumni Office   | University House 1                                      | E-4      | Law  | Begbie   | A-3      |
| Anthropology  | Cornett   | B-3      | Learning & Teaching Centre                               | University Centre                                  | C-3      |
| Anti-Harassment Office                                | Sedgewick "C" Wing                                      | B-3      | Library  | McPherson Library                                  | C-3      |
| Arts & Science (Deans' Offices)                       | Clearihue   | C-3      | Linguistics  | Clearihue  | C-3      |
| Arts in Education                                     | MacLaurin   | B-4      | Mail & Messenger Services                                | Saunders Annex                                     | D-1      |
| Athletics & Recreational Services                     | McKinnon  | C-2      | Malahat Review   | Sedgewick "C" Wing                                 | B-3      |
| Audio-Visual & Technical Services                     | McPherson Library                                       | C-3      | Maltwood Art Museum & Gallery                            | University Centre                                  | C-3      |
| Biochemistry & Microbiology                           | Petch   | C-4      | Marlet   | Student Union                                      | D-3      |
| Biology   | Cunningham  | C-4      | Mathematics and Statistics                               | Clearihue  | C-3      |
| Board of Governors                                    | Sedgewick "B" Wing                                      | B-3      | Mechanical Engineering                                   | Engineering Office Wing                            | C-4      |
| Bookings  | University Centre                                       | C-3      | Medieval Studies   | Clearihue  | C-3      |
| Bookstore & Campus Shop                               | Campus Services   | C-2      | Music  | MacLaurin Music Wing                               | B-4      |
| Business, School Of                                   | Human & Social Development                              | B-3      | National Coaching Institute                              | S Building   | C-1      |
| CFUV Radio  | Student Union   | D-3      | National Research Council                                | R Building   | C-1      |
| Campus Security Services                              | J Building  | D-2      | Network & Technical Services                             | Clearihue  | C-3      |
| Canada Employment Centre                              | Campus Services   | C-2      | Nursing  | Human & Social Development                         | B-3      |
| Canadian Climate Centre                               | Gordon Head Complex                                     | A-1      | Occupational Health & Safety                             | Sedgewick "C" Wing                                 | B-3      |
| Canadian Institute for Climatic Studies               | Saunders Annex  | D-1      | Pacific & Asian Studies                                  | Clearihue  | C-3      |
| Cartographic Resource Centre                          | Cornett   | B-3      | Parking (see Campus Security Services)                   | Clearihue  | C-3      |
| Centre for Asia-Pacific Initiatives                   | Begbie  | A-3      | Philosophy   | Clearihue  | C-3      |
| Centre for Earth & Ocean Research                     | E Building  | D-2      | Phoenix Theatres   | Phoenix  | A-4      |
| Centre for the Study of Religion & Society            | McPherson Library                                       | C-3      | Physical Education, Athletics & Recreational Facilities  | McKinnon   | C-2      |
| Centre for Sustainable Regional Development           | University House 4                                      | E-4      | Physics and Astronomy                                    | Elliott  | C-4      |
| Centre on Aging                                       | McPherson Library                                       | C-3      | Political Science  | Cornett  | B-3      |
| Chancellor  | Sedgewick "A" Wing                                      | B-3      | Post Office  | Campus Services                                    | C-2      |
| Chapel  | Chapel  | A-4      | President and Vice Chancellor                            | Sedgewick "A" Wing                                 | B-3      |
| Chaplains   | University Centre                                       | C-3      | Printing & Duplicating Services                          | Saunders Annex                                     | D-1      |
| Chemistry   | Elliott   | C-4      | Psychological Foundations in Education                   | MacLaurin  | B-4      |
| Child Care Services                                   | Child Care Complex                                      | E-2      | Psychology   | Cornett  | B-3      |
| Child & Youth Care                                    | Human & Social Development                              | B-3      | Public Administration                                    | Human & Social Development                         | B-3      |
| Cinecenta Theatre                                     | Student Union   | D-3      | Public Relations & Information Services                  | University House 2                                 | E-4      |
| Classics  | Clearihue   | C-3      | Purchasing Services                                      | Saunders Annex                                     | D-1      |
| Communications & Social Foundations                   | MacLaurin   | B-4      | Recital Hall (Phillip T. Young)                          | MacLaurin Music Wing                               | B-4      |
| Computer Science                                      | Engineering Office Wing                                 | C-4      | Records (Student)  | University Centre                                  | C-3      |
| Computing and Systems Services                        | Clearihue   | C-3      | Registrar, Administration (Admissions & Student Records) | University Centre                                  | C-3      |
| Conference Services                                   | Craigdarroch Office Building                            | D-3      | Research Administration                                  | Sedgewick "B" Wing                                 | B-3      |
| Continuing Studies                                    | University Centre                                       | C-3      | Residences   | Commonwealth Village                               | D-3/E-4  |
| Cooperative Education Programs                        | Campus Services   | C-2      |  | Craigdarroch                                       | D-3      |
| Counselling Services                                  | University Centre                                       | C-3      |  | David & Dorothy Lam Family Student Housing Complex | D-2/E-2  |
| Curriculum Laboratory                                 | MacLaurin   | B-4      |  | Gordon Head  | D-4      |
| David Lam Auditorium                                  | MacLaurin   | B-4      |  | Lansdowne  | D-4      |
| Development & External Relations                      | University House 1                                      | E-4      |  | McGill   | D-3      |
| Development Office                                    | University House 3                                      | E-4      | Secretarial Services                                     | Sedgewick "B" Wing                                 | B-3      |
| Earth & Ocean Sciences                                | E Building  | D-2      | Slavonic Studies   | Clearihue  | C-3      |
| Economics   | Cornett   | B-3      | Social & Natural Sciences                                | MacLaurin  | B-4      |
| Education   | MacLaurin   | B-4      | Social Work  | Human & Social Development                         | B-3      |
| Electrical and Computer Engineering                   | Engineering Office Wing                                 | C-4      | Sociology  | Cornett  | B-3      |
| Engineering Coop                                      | Engineering Office Wing                                 | C-4      | Software Development                                     | Clearihue  | C-3      |
| Engineering (Dean's Office)                           | Engineering Office Wing                                 | C-4      | Statistics Laboratory                                    | Cornett  | B-3      |
| English   | Clearihue   | C-3      | Student & Ancillary Services                             | University Centre                                  | C-3      |
| English Language Centre                               | University House 3                                      | E-4      | Student Financial Aid                                    | University Centre                                  | C-3      |
| Environmental Studies Program                         | Sedgewick "C" Wing                                      | B-3      | Students' Society  | Student Union                                      | D-3      |
| Equity Issues   | Sedgewick "B" Wing                                      | B-3      | Students' Society Ombudsperson                           | Student Union                                      | D-3      |
| Facilities Management                                 | Saunders  | D-2      | Telephone & Technical Services                           | Clearihue  | C-3      |
| Faculty Association                                   | University Centre                                       | C-3      | Theatre  | Phoenix  | A-4      |
| Faculty Club  | Faculty Club  | A-3      | Traffic (see Campus Security Services)                   |  |          |
| Felicita's Lounge                                     | Student Union   | D-3      | Travel Cuts  | Student Union                                      | D-3      |
| Fine Arts (Dean's Office)                             | Fine Arts Building                                      | A-4      | Unisoft Wares Inc.                                       | R Building   | C-1      |
| French Language & Literature                          | Clearihue   | C-3      | University Centre Auditorium                             | University Centre                                  | C-3      |
| Geography   | Cornett   | B-3      | University of Victoria Students' Society                 | Student Union                                      | D-3      |
| Germanic Studies                                      | Clearihue   | C-3      | University of Victoria Students' Society (Ombudsperson)  | Student Union                                      | D-3      |
| Graduate Students' Society                            | The George and Ida Halpern Centre for Graduate Students | D-2      | University Secretary                                     | Sedgewick "B" Wing                                 | B-3      |
| Graduate Studies (Dean's Office, Admissions, Records) | University Centre                                       | C-3      | Vice President, Academic and Provost                     | Sedgewick "A" Wing                                 | B-3      |
| Gymnasium   | McKinnon  | C-2      | Vice President, Finance & Operations                     | Sedgewick "A" Wing                                 | B-3      |
| Health Information Science                            | Human & Social Development                              | B-3      | Visual Arts  | Visual Arts  | A-4      |
| Health Services                                       | Health Services   | E-4      | Women's Studies  | Clearihue  | C-3      |
| Hispanic & Italian Studies                            | Clearihue   | C-3      | Writing  | Fine Arts Building                                 | A-4      |
| History   | Clearihue   | C-3      |  |  |          |
| History in Art  | Fine Arts Building                                      | A-4      |  |  |          |
| Housing, Food & Conference Services                   | Craigdarroch Office Building                            | D-3      |  |  |          |

**VISITOR PARKING:**

**DAYS** (7:00 a.m.-6:00 p.m.), MONDAY THROUGH FRIDAY  
(Statutory Holidays Excluded)

**Surface Parking:**

Hourly: Limited metered space available in most lots. See symbol (M) on map. Hourly parking is also available by purchasing the required time from the permit dispensers located at the Campus Directory Boards as well as Lot 5 and access road off Gordon Head Road. These machines accept credit cards as well as coin (exact change). Park in any unreserved stall in any numbered lot outside Ring Road.

Daily: Purchase permit at any Directory Board and park in any unreserved stall in any numbered lot outside of Ring Road.

**Covered Parking:**

Parkade below University Centre. Terms and rates are posted inside Parkade. Ticket dispenser will accept credit cards as well as coin (exact change).

**EVENINGS** (6:00 p.m.-7:00 a.m.), WEEKENDS AND STATUTORY HOLIDAYS.

**Surface Parking:**

**Surface Parking**  
No fees required.

Park in any lot but do not park in spaces marked "24 Hr. Reserve" or "Carpool" stall.

**Covered Parking:**

Parkade below University Centre. Terms and rates are posted inside Parkade. Ticket dispenser will accept credit cards as well as coin (exact change).











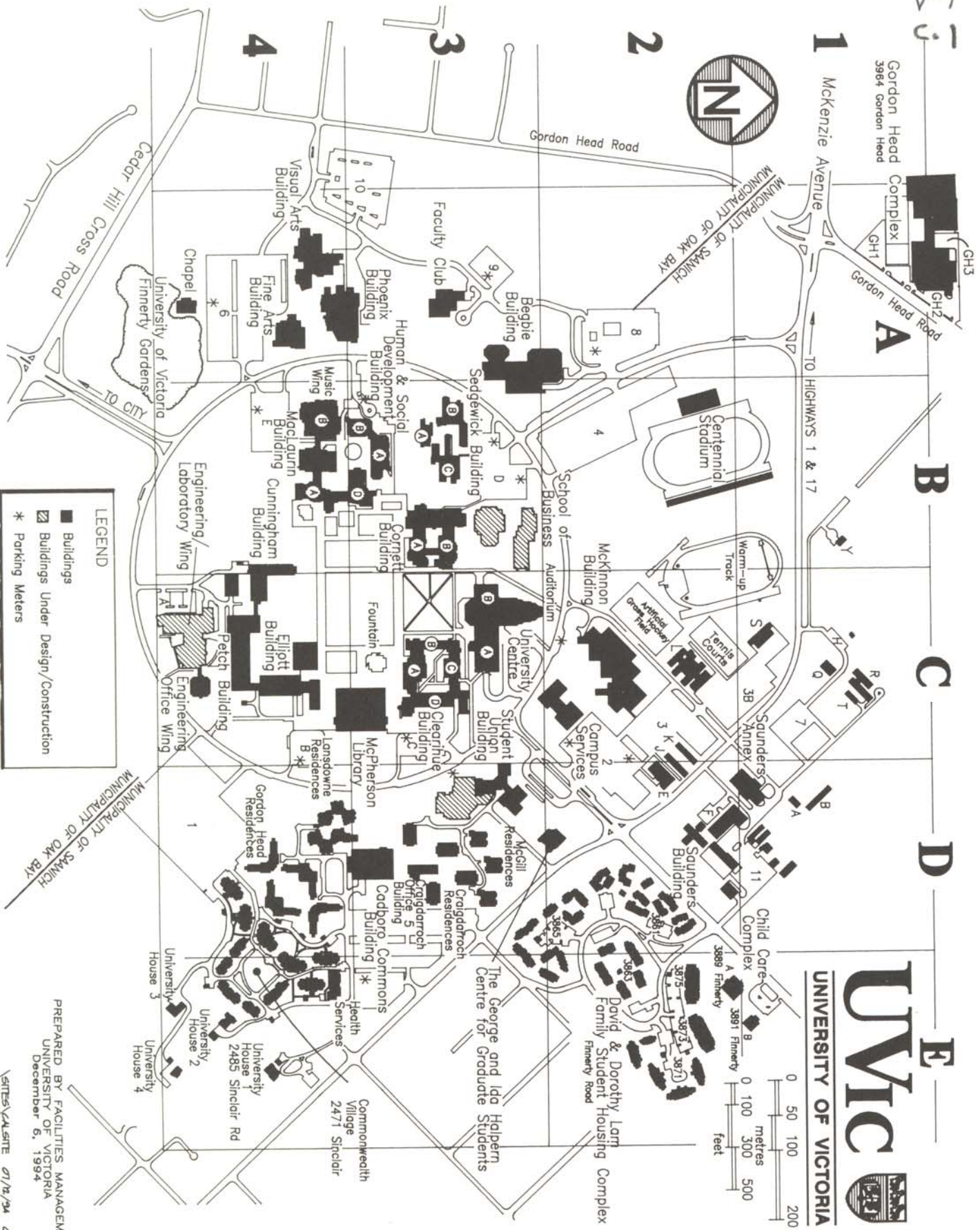








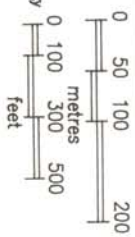
ARC LE3  
V4  
C.1



**LEGEND**

- Buildings
- ▨ Buildings Under Design/Construction
- \* Parking Meters

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UNIVERSITY OF VICTORIA



PREPARED BY FACILITIES MANAGEMENT  
UNIVERSITY OF VICTORIA  
December 6, 1994

SITES/VASITE 01/12/94 07110





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